MANUFACTURERS RECORD

A Turn to the Right

THE sale of the Federal Barge Line was announced on July 24th by Secretary of Commerce Weeks. The purchaser was the Federal Waterways Corporation of Delaware. The price, \$9,000,000, is to be paid over a 10 year period. This corporation is a new and wholly owned subsidiary of the St. Louis Shipbuilding and Steel Corporation.

Government ownership of the barge line dates back to 1918 when the Director General of Railroads commandeered privately owned floating equipment on the Mississippi and Warrior Rivers. With the return of the railroads to private ownership, it was announced that the government would get out of the barge line business. Until now it had not done so.

This sale will not only add a substantial sum to the Federal Treasury but, in addition it will place the property where it can yield annual tax revenue instead of incurring heavy losses at the taxpayers' expense.

This may be a small step, but it is a definite one on the road away from socialism.

phosphate

For the manufacture of complete fertilizers.

phosphate

For the manufacture o industrial chemicals.

phosphate

Ground rock phosphate for direct application

phosphate

Defluorinated phosphates for feed and mineral manufacturers

Phosphate Mines and Plants in Florida at Noralyn, Bonnie, Peace Valley, Achan, Mulberry; in Tennessee at Mt. Pleasant and Wales; in Mississippi at Tupelo.

phosphate division

INTERNATIONAL MINERALS & CHEMICAL CORPORATION General Offices: 20 North Wacker Drive, Chicago 6

International phosphates for industry and agriculture

the great snark hunt



LOOKING FOR OIL is often like looking for the snark, a creature which has one very odd characteristic: it doesn't exist at all.

For oil is just about the most elusive prey on earth.

In spite of the difficulties of seeking something which very often isn't even there, Cities Service geologists have participated in opening up some of the greatest oil fields in America . . . the Oklahoma City, Eldorado, Kansas and East Texas discoveries, to name a few.

As you read this, Cities Service geologists are tramping over Canadian tundra, wading through Louisiana marshes, climbing mountains, breathing desert dust, seeking—and finding—oil for the rapidly growing needs of your home, factory, farm and automobile.

Because of such men, America's oil reserves are greater now than at any time in our history.

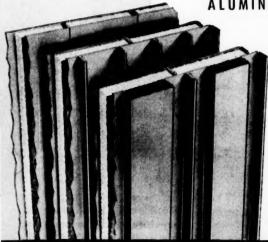


Quality Petroleum Products

INSULATED WALLS

for INDUSTRIAL and COMMERCIAL BUILDINGS

ALUMINUM, STAINLESS or GALVANIZED STEEL



FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent
to or Better than Conventional 16" Masonry Wall

The trend to metal walls for new industrial and commercial buildings is evidenced day after day with more architects and designers turning to this modern, economical, timesaving, permanent type of exterior wall construction. The Lincoln-Mercury plant illustrated below is one of three complete plants built by one manufacturer employing aluminum exterior walls throughout . . . another manufacturer has employed Mahon Aluminum Insulated Walls on two completely new plants involving fourteen separate buildings. One Power Company has built three large steam powered generating plants employing Mahon Stainless Steel Walls on one, and Aluminum on the other two. Insulated Metal Walls offer definite advantages in lower cost of both materials and labor, reduction in construction time—plus the fact that these walls can be erected under weather conditions which would preclude masonry construction. Insulated Metal Walls also lend themselves to individual architectural expression in building design. Mahon Insulated Metal Walls are available in the three exterior patterns shown at left. The Mahon "Field Constructed" Fluted or Ribbed Wall can be erected up to sixty feet in height without horizontal joints—a feature of Mahon walls which is particularly desirable in powerhouses or other buildings where high expanses of unbroken wall surface are common. See Sweet's Files for information or write for Catalog No. B-53-B.

THER.C.MAHON COMPANY

Detroit 34, Mich. • Chicago 4, III. • Representatives in All Principal Cities

Manufacturers of Insulated Metal Walls; Steel Deck for Roofs, Partitions and Permanent Concrete Floor Forms; Rolling Steel Doors, Grilles and

Permanent Concrete Floor Forms; Rolling Steel Doors, Grilles and Underwriters' Lobeled Rolling Steel Doors and Fire Shutters.

MAHON

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 122

August 1953

Number 8

7 Business Trends New and Expanding Plants 13 Little Grains of Sand Editorial Post-truce Investor Psychology Likely to Continue Gloomy 32 By Robert S. Byfield 33 Lone Star Begins Integrated Operation What Does New Industry Mean?

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Missouri Lists 117 New Industries in '53

The first six months of 1953 brought a total of 117 new and expanded plants that invested \$67,280,550 in Missouri, according to James D. Idol, industrial director of the Division of Resources and Development. These developments produced jobs for 10,888 new workers with total annual wages of \$32,228,150.

Included in the totals were 26 new plants, 98 expansions and 15 special industries (defense, transportation and utilities). The new industries added 1,181 workers with pay of \$3,553,600 at an investment of \$4,427,000. Exactly half the new plants were outside metropolitan St. Louis and Kansas City. (For the purposes of this study these areas were the City of St. Louis and St. Louis County, and Jackson and Clay counties.)

The 76 expansions, with a total investment of \$15,894,550, made 2,240 new jobs with an added payroll of \$5,958,100. The 15 special industries accounted for a \$46,959,000 new investment, 7,467 new workers receiving annual wages of \$22,717,050. Nearly 99 per cent of the investment in the special industries was in metropolitan St. Louis and Kansas City, with St. Louis getting practically all the jobs although but 55.67 per cent of the total investment in this category.

An analysis of the geographical distribution of plants revealed that St. Louis got 15.38 per cent of the new plants, 38.16 per cent of the expansions, 44.66 per cent of the special industries and 77.43 per cent of the new jobs. Kansas City received 34.61 per cent of the new plants, 26.31 per cent of the expansions. 26.66 of the special industries, and only 9.93 per cent of the total workers added. Outstate Missouri had 50 per cent of the new plants, 35.52 per cent of the expansions, 26.66 per cent of the special industries, and 12.63 per cent of the new jobs. Percentage wise, the study shows St. Louis received 34.18 per cent of the state's total growth, Kansas City 28,20 per cent and outstate Missouri the remaining 37.81 per cent.

Houston Port Agency Gets New Name

The board of Directors of the Houston Port and Traffic Bureau has voted to shorten the name of the port promotional agency to "Houston Port Bureau."

C. B. Fox, chairman of the executive committee, said the action was taken to more closely identify the Bureau with the Port of Houston and to lessen any confusion of the Bureau's work with that of commercial traffic counsellors.

The Bureau is the only organization devoted exclusively to cargo solicitation and the protection of traffic rates for the Port of Houston.

Offices are maintained in Houston, Kansas City, and New York under the direction of Nicholas Patton, general manager. The bureau's traffic and rate department is headed by Greg Perry, traffic manager.



Investigate and you will choose GADSDEN as the most desirable location for your NEW or EXPANDING PLANT.

Yes, GADSDEN, Alabama, offers you a combination of advantages worthy of your most serious consideration:

- * A choice selection of Plant Sites
- ★ Super quality native labor
- * Near large, expanding markets
- * Basic, natural resources
- * Excellent transportation Facilities
- * Low cost Power and Gas

- * On the Coosa River
- * Friendly, cooperative people
- * Excellent Schools and Churches
- ★ Desirable Recreational Facilities
- * Mild, healthful climate-

Gadsden's present industry is breaking National Records in Production!

Gadsden is proud of its present industry which includes:

- * Allis Chalmers Manufacturing Company
- * Republic Steel Corporation
- * Goodyear Tire & Rubber Company
- * Alabama Pipe Company
- * Agricola Furnace Company
- * Attalla Pipe & Foundry Company
- * A&J Manufacturing Company
- * Dwight Division, Cone Mills
- * Standard Coosa Thatcher Co.

You, too, will make a wise choice if you choose Gadsden!

For specific data please write or call

INDUSTRIAL DIVISION - JOE L. MOORE & CO., INC. CHESTNUT OF FOURTH - P. O. BOX 505 - PHONE 2531 - GADSDEN, ALABAMA

Second Quarter Tops First

BUSINESS CONTINUES GOOD

The months of May, June and July saw continuation of good business conditions that have prevailed for many months. The second quarter of 1953 was better than the first.

Final figures for the month of May show a level of total business activity some eight per cent higher than May 1952.

The first five months of 1953 show an even better margin over the same period of 1952.

Since the end of the last war, with the possible exception of part of 1949, each year has shown an increase of total dollar volume of business over that of the preceding year.

Opinion is becoming more and more general that the peak of the boom is at hand, and yet there are few if any signs of an imminent downturn.

SOUTH MAINTAINS POSITION

On average, the 16 states of the South have, since the beginning of the current year, maintained a steady position as related to the economy of the Nation.

In Manufacturing the Region lags about two per cent behind the National average, and in Farming the Region's status is deteriorating somewhat due to drought in several states. The South's agricultural output for the first five months of 1953 is 8% behind its 1952 record. The rest of the country is only 4% below 1952.

Even so, most states in the South report that their present level of industrial activity is the highest of all time, with few signs of immediate slackening.

Vacations can be expected to reduce activity somewhat during July and August but this is a seasonal matter, and from a comparative standpoint the summer of 1953 should show up to good advantage over 1952 by reason of the severe steel mill strike of last year.

Commercial activity in the South continues at a record breaking pace, and the Region also still leads the Nation in its relative proportion of Construction being put in place.

ON THE UPWARD SIDE

Most recent survey by the Department of Commerce in conjunction with Securities & Exchange Commission indicates that capital expenditures are being stepped up rather than decreased.

Latest advice respecting government expenditures for defense indicates that there will be little if any slackening in this direction during 1953.

Consumer interest is intense, and consumption expenditures are keeping pace with increased personal incomes.

So, with all three major segments of National Expenditure holding a steady course, chance of drastic readjustment at this time is greatly lessened if not completely nullified.

ON THE DOWNWARD SIDE

In the midst of current market activity, there are growing signs of increased competitiveness.

There are stories of new automobiles being sold on used car lots. Steel production has been stepped down from 100 per cent of capacity to about 97 per cent. Business insolvencies have taken a sharp upward turn and are considerably higher than in 1952. The Federal Reserve System, after tightening the purse strings of member banks returned to an easier money policy by decreasing required reserves and buying large quantities of government securities. This would indicate some alarm on the part of this Agency that a downturn of some sort was in the offing.

MONEY AND CREDIT

With business and industrial activity at record levels, and little in its conduct to give much indication of future trend, attention more and more becomes centered upon interest rates and conditions of credit.

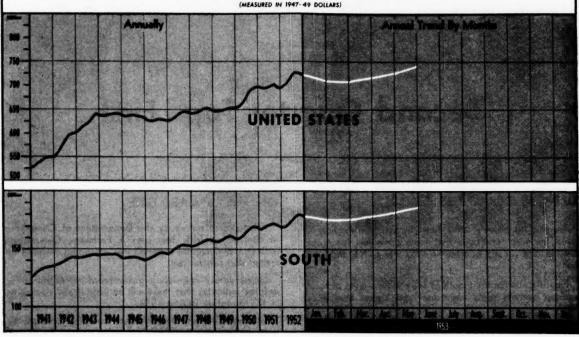
Borrowing by both business and consumers continues very strong, and the belief is becoming general that continuation of present good business can be maintained only by continuation of liberal credit.

Just how long credit can be allowed to remain on its current liberal basis, and what will happen when real curtailment begins—this is the question uppermost now in most minds.

(Continued on page 8)

PHYSICAL VOLUME
OF
ALL GOODS TURNED OUT BY PRIVATE ENTERPRISE

(MEASURED IN 1947-49 DOLLARS)



Regional Indicators

(Continued from page 7)

Form Me	arketings	(\$ Mil.)		Constru	ection (\$	Mil.)	
	May 1953	Apr. 1953	May 1952		May 1953	Apr. 1953	May 1952
South	\$ 484	\$ 489	\$ 555	South	\$1,003	\$ 916	\$ 962
Other States	\$1,461	\$1,408	\$1,588	Other States	\$1,899	\$1,688	\$1,788
United States	\$1,945	\$1,897	\$2,143	United States	\$2,902	\$2,604	\$2,750
Mineral	Output (\$ Mil.)		Manufa	turing (Mil.)	
	May 1953	Apr. 1953	May 1952		May 1953	Apr. 1953	May 1952
South	\$ 570	\$ 572	\$ 572	South	\$ 4,810	\$ 5,057	\$ 4,500
Other States	\$ 489	\$ 487	\$ 491	Other States	\$17,378	\$18,175	\$16,010
United States	\$1,059	\$1,059	\$1,063	United States	22,188	\$23,232	\$20,510

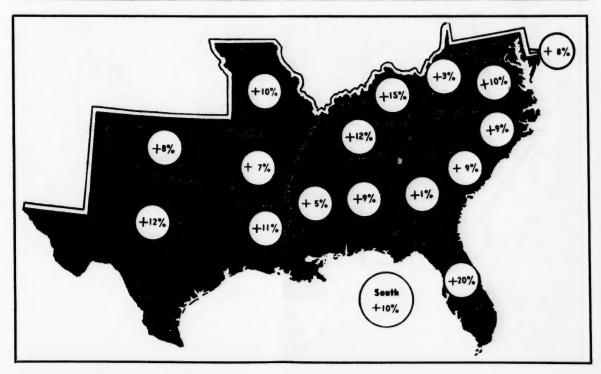
National Indicators

	May 1953	Apr. 1953	May 1952		May 1953	Apr. 1953	May 1952
Personal Income (\$ Bil.)	\$ 283.8	\$ 282.7	\$ 266.2	Ave. Weekly Hours (Mfg.)	40.6	40.8	40.2
Ave. Weekly Earnings (Mfg.)	\$ 71.05	\$ 71.40	\$ 66.33	Carloadings	3,883	2,957	3,678
Consumer Credit (\$ Mil.)	\$ 26,716	\$ 26,172	\$ 21,705	Consumer Prices ('47-'49=100)	114.0	113.7	113.0
All Inventories (\$ Mil.)	\$ 77,130	\$ 76,474	\$ 73,074	Retail Prices ('35-'39=100)	208.3	207.9	210.3
Mfg. Inventories (\$ Mil.)	\$ 45,048	\$ 44,574	\$ 43,144	Wholesale Prices ('47-'49=100)	109.8	109.4	111.6
Trade Inventories (\$ Mil.)	\$ 32,082	\$ 31,900	\$ 29,930	Construction Costs ('47-'49=100)	123.9	123.3	119.7
Bank Debits (\$ Mil.)	\$142,173	\$145,641	\$133,032	Electric Output (mil. kw. hors.)	41,995	41,510	37,065

SOUTHERN BUSINESS VOLUME-

Business Volume By Regions (\$ Million)
First 5 mos. of 1953 with gain (or loss) over First 5 mos. of 1952

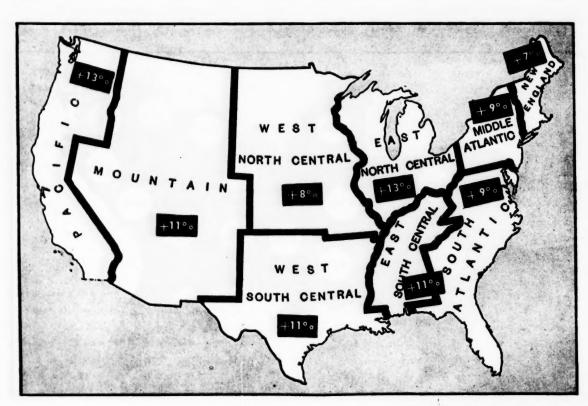
	rirst 5 mos. of 1755 with gain (or loss) over rirst 5 mos. of 1752									
	Farm- ing	Min-	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
Ala.	\$ 128 14%	\$ 55 -14%	\$ 180	\$1,272	\$ 197 even	\$ 138 +7%	\$ 793 +14%	\$ 904 +21%	\$ 136	\$3,803 +9%
Ark.	129 30%	46 -8%	92 —5%	400 +10%	113 +2%	57 +11%	403 +22%	572 +13%	75 -1%	1,887 +7%
D. C.	=	_	107 even	99 even	118	155	681 +11%	782 +17%	137 even	2,079 +10%
Fla.	280	32 even	398 +24%	603 +18%	268 +2%	248 +18%	1,302 +30%	1,556 +23%	256 +15%	4,943 +20°/
Ga.	158	13 even	218 -5%	1,710	266 +4%	196	1,193 —15%	1,191	217 +2%	5,162
Ky.	257 +2%	173 —18%	234 +47%	1,328 +12%	214 +1%	109	1,101 +30%	984 +17%	147	4,547 +15%
La.	108	331 +2%	301 +49%	1,313	294 even	137 even	942 +15%	964 +9%	147 +9%	4,537
Md.	99 even	8 even	268 +2%	1,764	266 +1%	225 +7%	1,123	1,134	179	5,066
Miss.	144 +3%	56	91 +8%	461	93 +1%	55 +10%	435 +2°/	# 494 +7%	72 even	1,901
Mo,	343 —12%	42	310 +15%	2,727 +16%	479 +4%	374 +4%	3,427	1,820 +12%	377 +6%	9,899 +10%
N. C.	155	10 even	341 -8%	2,812	266 +5%	166	1,575	1,301	206 +5%	6,832 +9%
Okla.	183	259 +9%	153 even	770 +12%	184	123 even	815 +13%	867 +11%	145 6%	3,499 +8°/
S. C.	72 —18%	5 even	283	1,193	102 +2%	76 +15%	491	721 +14%	95 +6%	3,038
Tenn.	182 -5%	25 20%	249 +17%	1,513	221 +1%	169	1,733	1,149	205 +12%	5,446 +12°/
Tex.	575 15%	1,402	884 +11%	4,537 +10°/	846 +3%	622	4,070 +18%	3,917	667	17,520 +12%
Va.	173 +1%	53 17%	280 3%	1,902	310 +2%	206 +10%	1,028	1,245 +13%	189	5,386 +10°
W. Va.	62 +5%	365 12%	71 -7%	766 +6%	191 even	70 +12%	465 +20%	615 even	95 +3%	2,700 +3°
South	3,048	2,875 even	4,460 +10%	25,170	4,428 +2%	3,126 +7%	21,577 +13%	20,216	3,345 +5%	88,245 +10°



NATIONAL BUSINESS VOLUME-

Business Volume By Regions (\$ Million)
First 5 mos. of 1953 with gain (or loss) over First 5 mos. of 1952

	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
New Eng.	\$ 339 —7%	\$ 20 even	\$ 661 even	\$8,231 +9%	\$ 765 even	\$1,016 +5%	\$4,179 +1%	\$4,709 +15%	\$ 761 +4%	\$20,681 +7%
Mid. Atl.	864 even	512 —9%	2,270 +4%	27,301 +10%	3,672 +2%	3,910 +2%	26,783 +13%	13,686	3,722 even	82,720 +9%
E. N. Cen.	2,315 —3%	406 6%	2,459 +9%	36,481 +18%	3,185 +4%	2,551 +5%	20,517 +17%	14,999	2,915 +5%	85,828 +13%
W. N. Cen.	3,091 even	420 +5%	945 +3%	8,717 +12%	1,517 +3%	1,088	10,180	6,472 +6%	1,059 +7%	33,489 +8%
S. Atl.	1,043 —5%	486 10%	2,020 +2%	11,159 +10%	1,835 +2%	1,384	8,035 +10%	8,731 +14%	1,401 +5%	36.094 +9%
E. S. Cen.	711 —2%	309 —14%	754 +18%	4,574 +12%	725 +1%	471 +8%	4,062 +16%	3,531 +15%	560 +3%	15,697
W. S. Cen.	995 —14%	2,038 +7%	1,430	7,020 +11%	1,437 +2%	939 +5%	6,230 +17%	6,320 +15%	1,034 +7%	27,443 +11%
Mount.	731 6%	620 +4%	503 +6%	1,749	626 +4%	321 +11%	2,106 +21%	2,383 +14%	417 +7%	9,456 +11%
Pacif.	1,144	517 +1%	1,510 +17%	10,303	1,647 +7%	1,420 +7%	8,260 +21°/	7,308 +14%	1,693	33,802 +13%
U. S.	11,233 —4%	5,328 even	12,552 +8%	115,535 +13%	15,409 +3%	13,100	90,352 +14°/	68,139 +12%	13,562 +4%	345,210 +11%



ECONOMICAL WATERAIL



Beyand, the quality of steel itself, routes. The result is economical delivery

PRODUCTS OF NEWPORT STEEL

Hot-Rolled Steel in Coil Hot-Rolled Pickled Steel in Coil Electric Weld Line Pipe **Hot-Rolled Sheets Galvanized Sheets Galvannealed Sheets Colorbond Sheets** Hot-Rolled Pickled Sheets **Electrical Sheets Alloy Sheets** Roofing and Siding Eave Trough and Conductor Pipe

NEWPORT, KENTUCKY



YOUNGSTOWN

Cold Finished CARBON AND ALLOY STEEL BARS

Uniformly satisfactory in service because—

Machinability is * outstanding

Tolerances are uniformly close

Metallurgical characteristics are rigidly controlled



FOR TOP QUALITY BARS

•ALL steel for Youngstown Cold Finished Bars is of predetermined analysis—produced in the open hearth by closely controlled blending and refining of raw materials. Rigid control from ore to finished product results in uniform dependability.

Youngstown Cold Finished Carbon and Alloy Steel Bars are furnished in standard shapes and sizes, in either coils or straight lengths. For further information, phone or write our nearest District Sales Office.

22570 VATZ COLD FINISHED CARBON AND ALLOY STEEL BARS

E YOUNGSTOWN SHEET AND TUBE COMPANY Manufacturers of Carbon, Allos and Yolo General Offices: Youngstown, Ohio - Export Office: 500 Fifth Avenue, New York 36, N. PHEF AND TUBLEAR PRODUCTS - CONDUIT - BARS - RODS - COLD FINISHED CARBON AND ALLOY BARS - SHEED S - PLATES - WIRE - ELECTROLYTIC TIN PLATE - COKE TIN PLATE - RAILROAD TRACK SPIKES

NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

BIRMINGHAM — Birmingham Southern Railway let contract to Joe Kurtts for \$26,-889 railroad yard office building. BIRMINGHAM — Gregs Cookie Co., 4001 Fifth Ave., let contract to Southern Builders & Designers for \$25,000 warehouse, 2917 Fifth Ave., N. Earl O. Murray, Clarke Bidg., Archt

Ave., N. Earl O. Murray, Clarke Bidg., Archt.

BIRMINGHAM — Perfection Mattress & Spring Co. let contract to Thomas C. Brasheld for \$56.826 office building, Shaw & Renneker, 2021 Sixth Ave., Archt.

BIRMINGHAM—Star Provision Co., 2001 N. 16th St., received bid from Hunter Construction Co. for \$19,420 bath and boiler house. Greer, Holmquist & Chambers, Stallings Bidg., Archt.

BIRMINGHAM—R. J. Thomas Co., Radio Service Co., 1905 Fifth Avenue, N., plans office and shop building, Wilmot C. Douglas, 2922 Seventh Ave., S., Archt.

DECATUR — Worthington Corporation, Harrison, N. J., plans \$3,500,000 factory along Tennessee River.

ENSLEY — Choctaw, Inc., 1184 Tupelo St., Memphis, Tenn., let contract to H. N. Donono, Birmingham, for \$35,000 plant building, 34th St.

FOLEY—Buckeye Cellulose Co. let contract to H. K. Ferguson Co., Clarke Bidg., Birmingham, for paper mill.

FOLEY—Buckeye Cellulose Co. let contract to Stone Construction Co., Decatur, for \$47,000 hoslery mill. Darcy T. Tatum, Jr., \$19 Frank Nelson Bidg., Birmingham, Archt.

LEEDS — General Steel Tank Co. to build addition to plant.

MILLPORT — Lamar Manufacturing Co.

LEEDS — General Steel Tank Co. to bulld addition to plant,

MILLPORT — Lamar Manufacturing Co. received bid from Brice Building Co., Birmingham, for \$220,199 garment factory, Johnston & Jones, Starkville, Miss., Archt.

MONTGOMERY—Montgomery City Lines, Inc., 502 N. Court St., received bids for \$85,000 office and garage building. Sherlock & Smith & Adams, 303 Washington Ave., Archt

& Smith & Adams, Archt.
Archt.
RUSSELLVILLE—Franklin Electric
Russellville—Franklin Electric
Russellville—Franklin Electric
Russellville—Franklin Electric
Russellville—Franklin Electric received bids for headquarters building. Southern Engineering Co., 1000 Crescent Ave. N. E. Atlanta, Ga., Archts.

SHAWMUT — West Point Mfg. Co., West Point, Ga., received bids for Community Center and swimming pool.

ARKANSAS

EL DORADO—Lion Oil Co. plans addition-\$5,000,000 catalytic cracking unit in re-

al \$5,000,000 catalytic cracking unit in refinery.

GENTRY — Ansco Manufacturing Co., A. S. Cox, Pres., to build new plant.

HEBER SPRINGS—Glove Corporation, C. F. Sturn, Pres., Alexandria, Ind., propose new plant.

JONESBORO—General Electric Co., plans

JONESBORD—General Electric Co., plans 550,000 plant.

LJTTLE ROCK—Arkansas Radio & Equipment Co., T. K. Barton, Pres., has FCC permit for television station.

MENA — Mylan Manufacturing Co., New York City, N. Y., plan \$180,000 shirt manufacturing plant.

PINE BLUFF — Central South Sales Co. has FCC permit for television station.

DISTRICT OF COLUMBIA

WASHINGTON — Group, including Rep. Richard F. Harless (D. Ariz.) plans 170-car parking lot, New Jersey Ave. & C St.

FLORIDA

PLORIDA

DADE COUNTY — Disbrow & Morson let contract to H. D. Jacoby, 2743 S. W. 28th Lane, Miami, for \$30,000 manufacturing building, 3520 N. W. 51st St. DADE COUNTY—Southern Crushed Stone Co. let contract at \$100,000 to Pan American Construction Co., Medical Arts Building, Miami Springs, for steel stone crusher, 11401 S. E. 120th St.

DADE COUNTY—Southern Tackle Co. let contract to Spector & Sons, 575 S. W. 22nd Ave., Miami, for \$17,500 warehouse addition, 4026 N. W. 25th St. Charles Paul Nieder, 1104 Ave. "C" 20th St. Airport, Miami, Archt. FORT LAUDERDALE—Trumbull Asphalt Co., of Delaware, 5900 Archer Road, Summit, II., let contract at \$220,000 to Powell Brothers, Inc., 14 S. W. First Ave., for 12 storage tanks, 1200 S. E. 20th St.

HALLANDALE—Southern Radio & Television Co., 306 N. Miami Ave., let contract to Burk Corporation, Inc., 1017 Kane Concurse, Bay Harbor Island, for transmitter building, W.T.V.J., Hallandale Beach, A. Herbert Mathes, 605 Lincoln Road, Miami Beach, Archt.

each, Archt,
HIALEAH—Pan American Terminals, 5541,
W. 37th Ave., Miami, to build two wareouses at \$24,600 each, 3620-80 N. W. 59th

St. HOMESTEAD—Pat Tucci Brothers let contract to Linton N. Connor, 97 N. E. 11th St., for \$80,000 packing house, 22 N. Flager St. MAITLAND—Winter Park Telephone Co. plans addition to Telephone Exchange Building. James Gamble Rogers, II, Winter Park, Archt.

Archt, MIAMI—Hunter Lyon, Inc., let contract to Jack Binkley, 1737 S. W. 11th St., for \$20,000 addition to office building, 901 S. Miami Ave. J. Frank Bradley, 2210 S. W. 22nd Terrace.

MIAMI—Southern Wine & Spirits Co. let ntract to Spector & Sons, 575 S. W. 22nd

New and Expanding Plants Reported in July 136 **Total For** First Seven Months of 1953

1133

First Seven Months of 1952

1256

Ave., for \$91,380 warehouse, N. W. 12th Ave. & 71st St.

OPA LOCKA—Southern Bell Telephone & Telegroph Co., 38 N. E. 2nd St., Miami, let contract to J. Y. Gooch Co., Inc., 1205 Congress Bidg., Miami, for dial telephone station, 2660 E. Superior St. Armistead & Sagus, 1330 Candler Bidg., Atlanta, Ga., Archt.

RIVIERA BEACH — Southern Bell Telephone & Telegraph Co., Atlanta, Ga., let contract to J. Y. Gooch Co., Inc., 1205 Congress Bidg., Miami, for telephone dial office, Armistead & Saggus, 1311 Candler Bidg., Atlanta, Ga., Archts.

SOUTH MIAMI—Fuchs Baking Co., 5780 S. Dixie Highway, plans \$85,000 addition to

SOUTH MIAMI—Fuchs Baking Co., 5780 S. Dixle Highway, plans \$85,000 addition to warehouse,

GEORGIA

ATLANTA—Southeastern Industries, Inc., let contract to Ira H. Hardin Co., 174 Mills St., N. W., for warehouse addition. Moscowitz, Willner & Millkey, 761 Peachtree St., St. N. W. 101
Wilz William & Milikey, 761
Feb. 17
CARTERSVILLE—City received bids for
CARTERSVILLE—City received bids for
CARTERSVILLE—City received bids for
CARTERSVILLE—City received bids for

CARTERSVILLE—City received bids for natural gas system. EAST POINT—Electric Autolite Co., To-ledo, Ohio, plans factory expansion. GAINESVILLE—J. D. Jewell, Inc., plans \$300,000 9-story feed mill and storage ware-

JESUP—Rayonier, Inc., plans office build-

ing. SAVANNAH — American Cyanamid Co. Kenneth C. Towe, Pres., New York, N. Y. plans \$14,000.000 plant, Robert & Co., 9 Poplar, N. W., Atlanta, Archts-Engrs.

WINCHESTER—Southern Bell Telephone Co., C. Hunter Green, Manager, plans \$15,-000,000 improvement program next year.

LOUISIANA

LOUISIANA—American Natural Gas Co. let contract to Stanolind Oil & Gas Co. and Superior Oil Co. for pipe line. ALEXANDRIA—Corps of Engineers, Little Rock, Ark.. to receive bids for lighting

Alexandria Air Base; Ser. No. Eng-03-050-54-2.

54-2.

ALEXANDRIA—Corps of Engineer. Little Rock, Ark., received bid from Barnet Brezner P. O. Box 654, for \$90.880 dental clinic building at Alexandria Air Base.

BATON ROUGE—Solvay Process Division of Ailied Chemical & Dye Co., received bid from L. W. Eaton Co. for \$45,611 alterations and additions to main office building. J. Roy Hasse, 655 Laurel St., Archt.

Haase, 650 Laurel St., Archt.

BATON ROUGE — Wolf's Bakery, 1504
Florida St., plans \$33,000 additions.

LAKE CHARLES — Corps of Engineers,
Galveston, Texas, received bids for roads
and parking areas for maintenance hangar,
Lake Charles Air Base, Inv. No. Eng-41-24354-7.

5-1-7.

LAKE CHARLES—Dunn & Quinn, 1735 S.

St., Archts-Engrs, for new KTAG Television Station building, let contract at \$41,613 to Bartley & Binnings, P. O. Box 344.

NEW OBLEANS—Gulf Coal & Coke Co., Inc., 1100 S. Claiborne Ave., let contract to E. B. Ludwig Construction Co., 130 Jefferson Highway, for \$80,000 one-story warehouse and office building.

NEW ORLEANS — Pontchartrain Motor Co., 719 Baronne St., plans 2-story sales and service building, 910 Girod St. Weiss & Silverstein, 302 Magazine St., Archts.

THIBODAUX—Harvey Peltier plans meat packing plant, to be known as Peltier Meat Packing Co.

MARYLAND

MARYLAND

BALTIMORE—Baltimore & Ohio Raiiroad Co., Charles & Baltimore Sts., let contract to Lacchi Construction Co., 2023 Maryland Ave., for \$20,000 signal tower, 2nd St. & Maude St. BALTIMORE—Baltimore & Ohio Raiiroad. Baltimore & Charles St., let contract to Lacchi Construction Co., 2023 Maryland Ave., for \$75,000 freight shed, 300 S. Eutaw St. BALTIMORE—Board of Estimates let contract to Masonry Resurfacing & Construction Co., B & O Coal Pier, Curtis Bay, at \$42,946 for pier repairs, Recreation Pier.

BALTIMORE—William T. Burnett & Co. let contract to Charles J. Spielman & Co., 2901 Maisel St., for \$16,000 storage building, 1500-20 Bush St., for \$16,000 storage building, 1500-20 Bush St., for \$455,300 plant, 1031 S. Dukeland St.

BALTIMORE—Gunther Brewing Co., received bid from Consolidated Engineering Co., 20 E. Franklin St., for \$455,300 plant, 1031 S. Dukeland St.

BALTIMORE—Gunther Brewing Co. received bid from Consolidated Engineering Co., 10c., 20 E. Franklin St., for \$45,300 plant, 1031 S. Dukeland St.

BALTIMORE—Industrial Oll & Terminal Co., 100 St. Paul St., plans \$75,000 freight dock, 3665 Benson Ave.

BALTIMORE—Maryland Lumber Co., Benjamin Kolker, Pres., 1100 E. Fayette St., plans new lumber yard, 300 block N. Warwick Ave.

BALTIMORE—National Brewing Co., 3602

ick Ave. BALTIMORE—National Brewing Co. O'Donnell St., let contract to Consolidated Engineering Co., 20 E. Franklin St., for \$125,000 office building, 3720 Dillon St. Van Rensselaer P. Saxe, 100 W. Monument St.,

Rensselaer P. Saxe, 100 W. Monument St.:
Archt.

BAITIMORE—Tin & Chemical Corporation received bids for office building 1900
Chesapeake Ave. Page & Franklin, Darlen,
Conn., Archts.

BAITIMORE—Western Maryland Railway
Co. plans \$4,000,000 improvement of shipping
facilities at Port Covington Terminal.

BAITIMORE—York-Hoover Corp. received
bids for alterations and additions to building, 107 E. 25th St. Buckler, Fenhagen,
Meyer & Ayers, Federal Land Bank Bidg.,
24th & St. Paul Sts., Archts,
HAGEBSTOWN—Western Maryland Railroad Co. Bailtimore, let contract to C. Willam Hetzer, Hagerstown, at \$149,600 for
waste treatment plant, Contract No. 24-52.

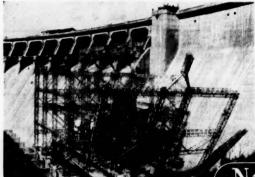
LANSDOWNE—Western Maryland ReilCorp. purchased government-owned electronic equipment plant.

SALISBURY—Wayne Pump Co. let contract to J. Roland Dashiell & Sons for \$58,986 warehouse addition, East College Ave.
A. P. Hoppe, Archt.

TIMONIUM—Massey-Harris, Racine, Wis.
let contract to Consolidated Engineering Co.,
20 E. Franklin St., Baitimore, for farm
implement building, parking lot, railroad
siding.

(Continued on page 14)

(Continued on page 14)



ME Nashville Bridge Company will gladly quote on struc tural steel requirements anywhere in the South and South st. Our skill in the fabrication and erection of intricate west. Our skill in the tabrication and exection of intricate steel structures is well-known. We are particularly qualified to supply the Power Distributing Industries with transmission. To supply the Power Distributing Industries with transmission towers and switchyard structures—hat-dip galvanized after fabrication features and erection of both steel and machinery for mavable type bridges is a specialty. Look to Nashville for simple steel requirements as well as intricate structural jobs.

Pleats and offices in Nashville, Bessemer, Alabama. We also ew and operate the Bessemer Calvania in Wester levest astronomy plea

ASHVILLE BRIDGE COMPANY NASHVILLE, TENN. -

AND EXPANDING NEW

(Continued from page 13)

MISSISSIPPI

CALHOUN COUNTY—Calhoun City Telephone Co., Inc., Calhoun City, received bids for Telephone System.

GREEN WOOD—Commar Products Corpotion of Newark, N. J., has approval of \$750,000 bond issue for new building.

GULFORT—Mayor and Board of Commissioners let contract to M. T. Reed Construction Co., P. O. Box 1006, Jackson, for \$324,780 extrusion factory and office building for Mississippi Aluminum Corporation. Shourds & Mogabgab, Archts.-Engrs., Fisher Bidg.

HOLLY SPRINGS—Board of Supervisors of Marshall County let contract to G. E. Bass & Co., P. O. Box 1033, Jackson, at \$391, 19 for factory building to be occupied by Erie Resistor Corporation of Erie, Pa, John L. Turner, 201-2 Medical Bidg., Jackson, Archt.

JACKSON—Century Manufacturing Co. let.

Archt.

JACKSON—Century Manufacturing Co. let bid to Maloney Construction Co., 100 E. Pearl, at \$12,326 for site preparation for factory. John L. Turner, Medical Bidg..

Jackson, Archt.

JACKSON—Gordon Transports, Inc., Liv-ingston Road, received bids for terminal buildings and paving, N. W. Overstreet & Associates, Archts,-Engrs., 201 N. Lamar

& Associates, Archts.-Engrs., 201 N. Lamar St.

LEXINGTON—City let contract to Jackson Engineering Co., Inc., P. O. Box 861, Jackson, for \$96.471 plant for Kickernick, Inc., of Minneapolis, Minn. John L. Turner & Associates 201 Medical Bidg., Jackson, Archts.

MONTICELLO—Board of Supervisors of Lawrence County received bids for new Phale Corporation plant. Spain & Biggers. Deposit Guaranty Bank Bidg., Jackson, Archts.

OKOLONA — Board of Supervisors of Chickasaw County let contract to J. E. Staub & Co., Fulton, for factory building for Stratford Furniture Corp.

TUNICA—Planters Tractor & Implement Co., let contract to H. G. Hall for office and warehouse.

MISSOURI

COLUMBIA — The Curators of The University of Missouri, Leslie Cowan, Jesse Hall, let contract to John Epple Construction Co., 1417 Hickory, for \$169,000 TV transmitter and auxiliary studio building, Highway 63, 5½ miles S. E. of town.

HUNTSVILLE — International Harvester Co. plans to occupy Huntsville-Sinclair strip coal mine as site for large-scale testing operations for Harvester machines.

KANNAS CITY—Sinclair Refining Co., 906 Grand Ave., plan service station, 3703 Chippewa St., cost \$34,000.

ST. LOUIS—Akansas Motor Freight Lines, 1nc., 900 S. 13th St., let contract to Murch-Jarvis Co., Inc., 718 Locust St., for \$25,000 office addition.

NORTH CAROLINA

BOONE — International Resistance Co., Phila., Pa., constructing new plant.
BURGAW — Volunteer Portland Cement Co., Knoxville, Tenn., plans multi-million doilar cement plant.
CHARLOTTE—Carolina Transfer & Storage Co. let contract to Southeastern Construction Co. for \$40,000 warehouse, Marvin Helms, Archt.

Helms, Archt.
CHABLOTTE - Duke Power Co. plans

CHARLOTTE — Due \$94,400,000 expansion program. CHARLOTTE—A. K. Sutton Co. let con-tract to Southeastern Construction Co., 301 W. 2nd, for 3-story addition to present

W. 2nd, building.

ENKA—American Enka Corporation, J. E. Bassill, Pres., to erect \$35,000,000 nylon

Telegraphy

plant.
FORSYTH COUNTY — Old Town Telephone System, Inc., Reynolda Rd., Winstonsalem, received bid of \$279,213 from Rockingham Construction Co., Harrisonburg, Va., for rural telephone project No. 502-A. GREENSBORO — Traders Chevrolet Co. received bid of \$66,235 from Abrams Construction Co. for additional building. McMinn & Norfieet, Archts.

HIGH POINT — Kay Manufacturing Co.

granted permit to build \$122,500 plant on Taylor St.

MOCKY MOUNT—Brewer Paint & Wall Paper Co. received bid from D. J. Rose & Son for \$34,390 office building. Harry J. Harles, Archt. SWANNANOA — Oerlikon Tool & Arms Corp. of America let contract to Merchant Construction Co., Asheville, for detention basin. Six Associates Inc., Asheville, Archt. WATAUGA COUNTY — International Resistance Co., Philadelphia, Pa., let contract to C. M. Guest & Sons, Greensboro, for electronics plant. Biberstein, Bowles & Meacham, Charlotte, Archt.-Engrs.

WEAVERVILLE — Cashmere Corporation of America let contract to Merchant Construction Co., Asheville, for pilot plant. Lockwood Greene Engineers, Inc., Spartanburg, S. C., Archt.-Engr.

WINSTON-SALEM—Krispy Kreme Doughnut Co., Vernon Rudolph, Pres., received bids for office and factory addition to Ivy Street plant. Lashmit James, Brown & Pollock, 602 Reynolds Bldg., Archts.-Engrs.

OKLAHOMA

PONCA CITY — Continental Blacks, Inc., 1400 W. 10th St., Amarillo, let contract to Hydrocarbon Construction Co., M & M Bidg., Houston, Texas, for \$2.750,000 plant. PRYOR—Certain-Teed Products Corporation, Ardmore, Pa., plan a felt mill.

SOUTH CAROLINA

AIKEN — South Carolina Electric & Gas Co. let contract to Gilbert & Cooper Construction Co., Augusta, for \$47,618 warehouse. Lyles Bissett. Carlisle & Wolff, Archt.
ANDERSON — American Bakeries, Inc., Atlanta, Ga., received bid from Daniel Construction Co., Greenville, for \$705,000 plant. Stevens & Wilkinson, Atlanta, Ga., Archts. COLUMBIA—The State Co., M. Blalock, Pres., received bids for newspaper publishing plant. Robert & Co. Associates, 96 Poplar St., N.W., Atlanta, Ga., Archts.-Engrs. (Continued on page 62)

TRINITY INDUSTRIAL DISTRICT



"Under the Skyline of Dallas"

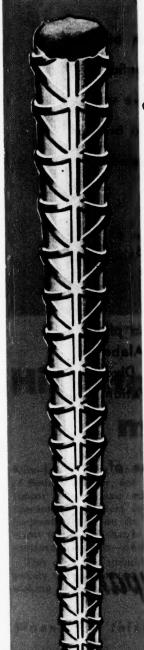
the new home of

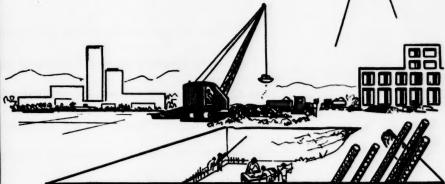
Williamson Sales Corporation and Leich Sales Corporation

For information about property in the Trinity Industrial District consult your real estate broker or . . .

INDUSTRIAL PROPERTIES CORPORATION, 401 Republic Bank Building, Dallas, RI-6552

Connors Puts The Steel On The Job When You Need It





Try Connors service on your next construction project. You will find that your job progress, insofar as work requiring reinforcing steel is concerned, follows much closer to schedule.

Dependable service is a tradition at Connors and is available to you because of these factors:

- Compactness and flexibility of Connors rolling mills;
- Fabricating shop within a few feet of rolling mills;
- Connors access to transportation facilities, both truck and rail;
- 4. Teamwork between Connors sales and production people.

We invite your inquiry . . .

CONNORS PRODUCTS

- Concrete Reinforcing Bars
- Hot Rolled Strip
- Merchant Bars
- Special Sections

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H. K. PORTER COMPANY, INC.

P.O. BOX 2562 • BIRMINGHAM, ALA.

An oft-repeated statement by Alabama Power Company

"The large construction program of the Company represents our faith and confidence in the continued growth of the area we serve, and our determination to be prepared before demands arise to serve power requirements."

ABBEVILLE and Southeast Alabama have evidence of our "being ready" by the establishment in Abbeville of Pepperell Manufacturing Company's modern new plant.

Our association with Pepperell has been long and pleasant—they were the first to establish a large plant in Alabama after the organization of our Industrial Development Division nearly 30 years ago. Since that first plant, their operations in Alabama have increased many times.

Abbeville is fortunate in having Pepperell as one of its corporate citizens.





This modern machine is next to infallible—yet even so, the Bethlehem operator checks the reduction of his wire.

His attention to detail means better rope for you

Wire-drawing is a fundamental step in the making of Bethlehem rope, and it's done on machines that almost never make mistakes. Nevertheless, this operator, like others in the Bethlehem mill, runs frequent checks on the work going through. He wants to be sure that his part of the job meets the specified standards—which are very, very high.

This care, this attention to detail, is not confined merely to the drawing of wire. It begins with the making of the steel used in Bethlehem wire rope, and it carries through each and every step to the final inspection and reeling.

Care is a lot of *little* things which, taken together, mean a quality product. It is one of the reasons why you cannot buy a better rope than Bethlehem makes.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA. On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. Export Distributor: Bethlehem Steel Export Corporation

When you think WIRE ROPE...think BETHLEHEM



LITTLE GRAINS OF SAND.

"Little drops of water, little grains of sand, Make the mighty ocean, and the pleasant land."

Why? Our republic was created by the words of the Constitution. Disregard the words and there is no Republic, nor any protection for anyone. That is where our trouble lies today. Few understand the subversion and usurpation that has taken place in our form of government and that they were parties to it. A return of Constitutional government does not mean a return to "horse and buggy days" as some would like us to believe. Instead it would rid us of the bureaucracy of a huge centralized government such as we fought against in 1776. Consider the fact that in 1912 the government operated on a budget of one billion dollars and served over 92 million people well. Why should it cost 75 times as much to serve 160 million today?

Private Power and the Atom. "If you believed everything the advocates of government-owned electric power told you, you would suppose that atomic energy development and hence the national security depended on a federal occupation of the electric power field. The

Tennessee Valley Authority loses no opportunity to advertise the fact that it has sent current to Oak Ridge.

"Now ten privately owned electric utilities have had the audacity to plan to provide the power to be needed at a new atomic energy plant near Portsmouth, Ohio. They have formed the Ohio Valley Electric Corporation, which has applied to the Securities and Exchange Commission for permission to issue \$420 million

in securities to finance in part the building of additional plants. Arrangements for marketing the Ohio Corporation's obligations have already been made.

"And it has happened before. Five companies in the Middlewest organized jointly Electric Energy, Inc. about two years ago. It is creating at Joppa, Ill., a plant which is to provide the electric service which the new atomic energy installation at Paducah, Ky., will require.

"It would appear that the extension of public power is not essential to the national security and never was."

—Wall Street Journal.

Favoritism. There is a basic flaw in the New Deal and Fair Deal sponsored union argument that the only way to fight a recession is to increase labor's share of national income. There are too many population groups that cannot hope to keep in step with any such increase in income and hence are in danger of being priced out of the market.

The increment of gain from increased productivity over long periods should not all go to labor, but should be shared with the public in the form of improved products or lower prices and with the investor, who supplies the facilities for production. If we are to have a functioning and democratic free enterprise system, no policy can be good in the long run that favors one population group over all others.

Definitions. "The socialist seems to look upon government as an end in itself, while the libertarian looks upon government merely as the means to counteract the evil of anyone's practicing violence, fraud, and so

forth. The socialist tends to look upon government as the major source of 'the common good.' The libertarian distrusts government and watches it closely at all times to make sure that it does not itself become predatory under the guise of defending the life, liberty, and property of the citizens.

"The socialist puts his trust in the force of government. The libertarian puts his trust in himself and other free men

who meet in a market place where no person has the power to force any other person to conform to his viewpoint or desires in any respect except 'Don't aggress against me.'

"Socialists believe that if services and goods were exchanged only if and when mutual willingness prevailed, society would suffer; that people, by and large, would not attend to their own interests; that they would not make the 'right' decisions. Socialists are fallible folk, even as you and I. But in spite of that obvious fact,

(Continued on page 22)

Rising interest rates, which are still far lower than those of a generation ago, are among the signs that point the way to the return of a stable dollar.





SERVEL

"Farming" is our business!



ALADDIN

decoration of plastics "farm out" their jobs to KUSAN, specialists in custom molding. So instead of cotton and corn, our crops are refrigerator parts, vacuum bottles, football helmets, chime covers, and innumerable other items for home, office and factory. The unlimited color range, economy and versatile properties of the thermoplastics add up to better products for today's more enjoyable living. KUSAN is well equipped to serve you efficiently from plants in Nashville, Tennessee and Henderson, Kentucky. Call KUSAN on your next plastic job or when you'd like to compare plastics with other materials for your product.

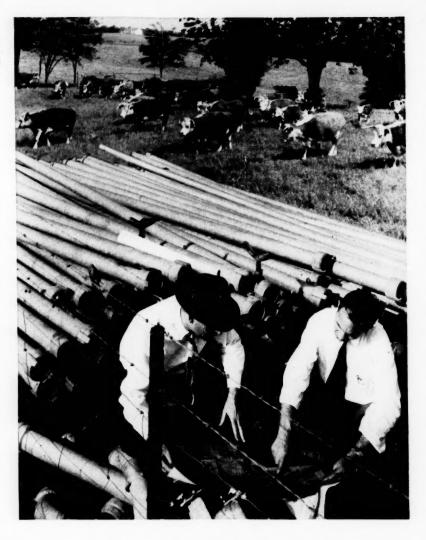
Companies demanding the best in the molding and

KUSAN, INC.

NUTONE

Two agricultural scientists. from a large state university, check the blue print for irrigation pipe on Republic's experimental farm.

HERE THE CATTLE ARE GUINEA PIGS



These cattle are linking industry to agriculture—and vice versa. They're on a series of two-acre fields at Republic Steel's experimental farm, where some controlled plots are being irrigated, some not. This determines how much extra grass can be grown from extra water. Then, how much beef results from the additional grass.

Soil ruined by destructive farming can be restored by grass. When depleted areas are returned to high productivity of pasture and herd, the entire community benefits. In fact, the entire nation is richer.

The immediate application of Republic's farm research is that animals must be fenced and Republic makes steel farm fence; that irrigation requires pipe and Republic makes lightweight steel pipe for irrigation, and steel for farm machinery and buildings. But beyond this immediate prospect, Republic's goal anticipates the future.

Agriculture and industry, these are the balance wheels of a nation's independence. Food and steel, these are the foundations of a nation's strength in peace or war. Each must prosper to keep our country strong.

For America to stay healthy, progress must be mutual for *all* who share its economy. Republic's farm experiments are an expression of this conviction. The Republic policy is to *do for* its customers as well as to *sell to* them.

We believe this is an enlightened approach to economics which promotes the continuing welfare of all.

REPUBLIC STEEL

GENERAL OFFICES . CLEVELAND 1, OHIO

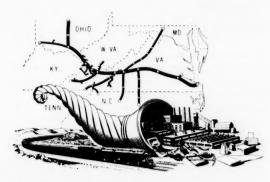
REPUBLIC

WORLD'S WIDEST RANGE OF STEELS AND STEEL PRODUCTS

Put All of them to work for you in the Land of Plenty*

You don't have to make any compromise with your industrial requirements when you build your factory in *The Land of Plenty*. This great-and-growing manufacturing region offers virtually *all* of the natural and man-made characteristics which can give you efficiency of plant operation and product distribution. Build your plant in *The Land of Plenty*, and put all of these advantages to work for you.





Let the Norfolk and Western give you detailed, reliable information about *Land of Plenty* plant sites to meet your requirements. No obligation . . . Your confidence respected. Write, wire or call —

THE INDUSTRIAL AND AGRICULTURAL DEPT.,

Brower DR-613 (Phone 4-1451, Extension 474)

Morfolk and Western Rollway

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Norpolkand Westerne RAILWAY

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Profit-sharing or combination plans.
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ENGINEERING CONSTRUCTION

SAND — GRAVEL — STONE

COMMERCIAL SLAG

The Arundel Corporation

Baltimore 2. Maryland

Brooklyn 1, N. Y.

Miami 6, Fla.

LITTLE GRAINS OF SAND

(Continued from page 18)

socialists believe that society is improved when their wills are imposed on the rest of us; that society is menaced if you and I and others go without controls over our affairs. They believe they can direct my life in ever so many areas 'better' than I can direct my life myself. Socialists have little faith in what free men can and would accomplish.

"Libertarian beliefs are quite the opposite. They have faith in the potential accomplishments and the moral rightness of willing exchange. Indeed, a libertarian cannot be an authoritarian. He limits his own belief in force to repellent or defensive force against those who aggress against him. And he believes in a government limited to the use of this same force, administered equally and justly for all. The libertarian leaves all else to private initiative and to willing exchange."—Leonard E. Read of the Staff of Foundation for Economic Education.

False Security. When a nation tries to achieve security for its citizens instead of placing its faith on the courage and independence of its citizens, its decay has already begun.

Social security and economic progress are not incompatible but are closely related. The more effectively our system functions and provides a high level of employment, the less need there will be for welfare aids. So the emphasis should be placed on making our economy tick. Toward this end, there must be awards for risk taking so that there is an adequate flow of funds back into business. Human nature being what it is, the prospect of individual reward based upon contribution to society is the mainspring of progress, and the release of individual energy under such a stimulus is the most creative force in the world. A favorable climate must be maintained for free enterprise, as is now being fostered by the present Administration, so that business can face the future with confidence and faith, and thus be impelled to embark upon risk-taking ventures that provide the dynamics of our economic progress.

There is no such thing as absolute security, and any workable security must be linked with risk taking. In other words, to shy away from risk is to take the greatest gamble of all, as it means not only the loss of security but of freedom as well.

A False Gauge. The tradition that Congress must enact a certain amount of new legislation by a certain date lest the Republic fall apart is part of the general idea that a Congress ought to be judged by the number of laws it passes. Come adjournment, the commentators will tot up the number of new laws—and woe betide the Congress if it hasn't fulfilled its quota. It will be stigmatized as a "do-nothing" Congress.

Congress may rightfully be held deficient when it is laggard at paying its just debts and operating expenses, but beyond that it is a rare circumstance that demands the passing of new laws in a mighty rush. A look at

(Continued on page 26)

extra whiteness

for mass or contrast in architecture

plain or waterproofed



Trinity Division, General Portland Cement Co., 111 W. Monroe St., Chicago; Republic Bank Bldg., Dallas; 816 W. 5th St., Los Angeles; 305 Morgan St., Tampa; Volunteer Building, Chattanooga.

Industry finds many direct and indirect values in the use of Trinity White Cement for its structures. It is recommended for architectural concrete units, terrazzo floors, stucco, cement paint and special uses where beauty or light-reflection are factors. Trinity

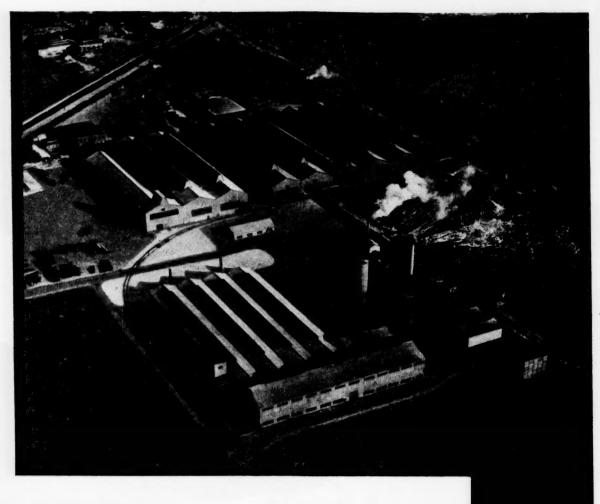
White-the whitest white cement, is a true portland cement that meets ASTM and Federal specifications

TRINITY WHITE Portland Cement

As white



as snow

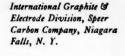


A Report was Essential

When International Graphite & Electrode Corporation foresaw the need of increased facilities for the manufacture of graphite electrodes, Stone & Webster Engineering Corporation was asked to make a report and recommendations.

The report included a process study, a geographical analysis of product distribution, and a plant site survey which considered both economical distribution and the availability of power and skilled labor.

When, in accordance with the recommendations, International Graphite decided to add extensive new facilities to its Niagara Falls plant, Stone & Webster Engineering Corporation was employed to design and build them.



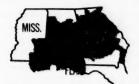


STONE & WEBSTER ENGINEERING CORPORATION

A SUBSIDIARY of STONE & WEBSTER, INC.



Stumping the South for Chemical Profits



This is "SOUTHERN CITY," U.S.A., our way of expressing as a unit the vast Southeast area served by the four associated electric power companies in The Southern Company system.

Valuable chemicals from old stumps form the basis of a multi-milliondollar business in the South.

This process, yielding more than 50 materials used in the manufacture of such products as disinfectants, deodorants, synthetic rubber and fibers, is just one extraordinary development in the South's continually expanding chemical industry.

In 1951 alone, more than half the nation's new chemical plants were established in the Southern states. This section now leads the nation in the production of synthetic rubber, chemical fertilizer, vegetable oils, tung oil and naval stores.

Abundant resources and ample electric power, plus the many other advantages of the region, are contributing to the growth of this vital industry. In addition, Southern research is constantly turning up new and profitable products through the magic of chemicals.

Write the industrial development departments of any of the four operating companies for further information.

ALABAMA POWER COMPANY, Birmingham, Alabama GEORGIA POWER COMPANY, Atlanta, Georgia GULF POWER COMPANY, Pensacola, Florida MISSISSIPPI POWER COMPANY, Gulfport, Mississippi

THE SOUTHERN COMPANY, Birmingham . Atlanta

Mere payment of premiums does not insure

 It is easy to buy fire insurance but difficult to prove a loss.
 When fire occurs you must be able to prove what you lost and its cash value.

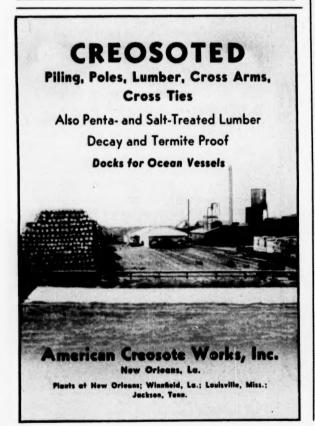
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LITTLE GRAINS OF SAND

(Continued from page 22)

the consolidated statutes will convince you that the laws are not now in short supply.

Even desirable laws are not necessarily instant "musts." You may think the creation of a Small Business Administration or a revision of immigration quotas desirable. For our own part, we would like to see the government dispose of its rubber plants and the country dispense with the R.F.C. and any substitute for it.

The Right to Earn a Living. "A long and bitter strike against a major California electric company shows to what dangerous extremes some labor bosses will go. Only the fact that many employees, realizing their responsibility to the vast territory this utility serves with power, refused to go on strike prevented what might have been a terrible disaster.

"A single issue prevented quick settlement of the strike—the union's demand for a closed shop. All other issues, including wages, could and would have been settled in the normal manner. The company has taken the position that it has no right to refuse to employ a man unless he will join and pay tribute to the union. In the words of the company's president, 'The one big issue . . . was the demand for something which the management of our company is wholly powerless to give, because it is not theirs to give—the control over the lives of employees, and through that control, of the public served by the company.'

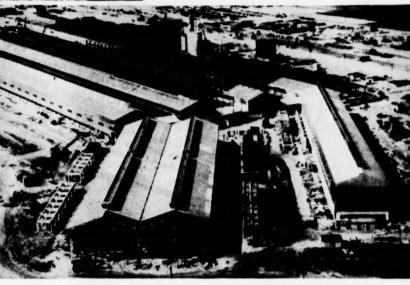
"The fact that this strike was against a power company made its menace all the greater—stoppage of power service in heavily populated areas would be catastrophic. But the principle involved is the same regardless of what kind of industry is involved. A union monopoly, which is what a closed shop or a union shop involves, is a form of enslavement of labor. It is intolerable in a supposedly free country where no organization should have the power to deny a man the right to work."—The Railroad Journal.

"Free" Colleges. It is particularly important for us to retain a strong and vigorous group of private institutions of higher learning. The independent liberal arts college especially must be preserved in its full vigor. So-called liberal or general education is essential to the kind of free society in which business moves ahead and prospers. Maintaining the private liberal arts college as a genuinely independent institution is indispensable to our way of life. For freedom rests on the competition of free choice, both in the business world and in the world of ideas.

American corporations would be among the first to suffer if, because of inadequate support, freedom of choice in the educational world should be limited to state-supported colleges and universities. Our intellectual resources, our spiritual and material well-being and our basic freedoms depend in considerable measure upon how well higher education performs its essential tasks. The quality of that performance will suffer if, because of inadequate support, the private educational institutions are taken from private hands.

JONES & LAUGHLIN STEEL CORPORATION'S multi-million dollar expansion project on Pittsburgh's South Side.

REYNOLDS METALS COMPANY, San Patricio Plant, Corpus Christi, Texas, for increased production of aluminum.



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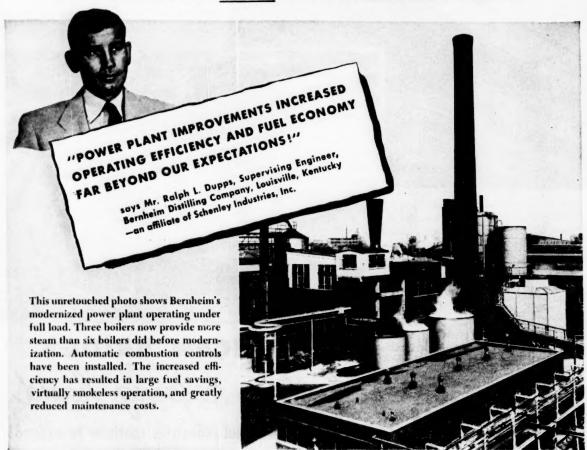
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"What Enriches the South Enriches the Nation"

Our Progressive Utilities

Privately owned and managed electric and gas utility companies have scheduled approximately 4.4 billion dollars of new capital expenditures for 1953. This investment sets a new record high for the industry and represents an increase of 530 million dollars over expenditures for the same purpose during 1952.

During World War II and the immediate postwar years that followed, fears were often expressed by left wing politicians and others of their ilk that privately owned and operated public utilities would not be able to expand sufficiently to keep pace with the ever growing demands that were being, and would be made upon them by our dynamic economy.

How false these fears were have now been proved by actions and their resulting facts. Not only has the utility industry adequately met the demand placed upon it, but it has also invested huge additional sums in replacement of up-to-the-minute equipment in its less efficient properties. Thanks to such expenditures, unit costs have been held down so that prices to consumers are at, or near, pre-World War II levels.

It is worth interpolation here to note that the construction of large natural gas pipe lines has brought this low-cost and highly desirable fuel to many new markets which formerly were denied access to it. It is significant that this enormous and wide-spread program has been accomplished without weakening the financial strength and stability of the utility industry. It raised 2.6 billion dollars last year through sales of new securities, and a large proportion of this total consisted of preferred and common stock issues. As a matter of fact, a number of individual utility companies have increased their ratio of equity to borrowed capital. Thus, they have increased the strength of their financial structures.

Private utilities have met successfully the challenge of a rapidly expanding demand for their services because of the removal of the threatening cloud of encroaching federal competition. The thorough defeat of the New Deal-Fair Deal clique which had preempted the Democratic Party gave private utility management assurance that further socialistic experiments in grandiose public power projects would not be rashly undertaken. This unquestionably has encouraged management and stimulated investment by the business public.

The willingness and ability of the private management utilities to raise and invest huge amounts of capital form an important testimonial to the fact that American business has faith in America.

Post-truce investor psychology likely to continue gloomy

Yet sooner or later fears and uncertainties must lose their potential for depressing quotations.

By Robert S. Byfield

Financial Editor

OW that the true in Korea has arrived a chain of events has been set in motion. There will be a good deal of argument as to whether we have lost this war, whether it has been a stalemate or whether we have actually achieved certain of the objectives which we had in mind in June 1950 when hostilities began. It will serve no purpose to enter into this discussion primarily because we have already expressed ourselves on this point. At any rate it is the first military conflict in over one hundred years from which we have not emerged with a clean cut victory in hand and with the ability to dictate the peace terms. Whether in World War I or II we were wise in affixing our signature to the peace treaties which resulted is another matter. Judging by the record of our diplomacy in the 20th Century, we are likely to end up with a shellacking at the conference table which will make our battlefield performance look like a victory. With the ink on the true agreement hardly dry, the pattern of the intense pressures which will be directed against us is already beginning to emerge. The British-Indian bloc has assumed the leadership in this re-

It is significant that the end of hostilities was not greeted in many American quarters with enthusiasm. The psychology surrounding the event was unquestionably bad. The securities markets have at this writing continued to display the extreme apathy which has been their characteristic for some months, Public disappointment, discouragement, frustration, resentment and fear are still being registered and are not likely to abate. We hear much these days in the public press and on the radio and television about a "hysteria" which is supposed to have gripped the American people. If this is the case we find difficulty in identifying it. But so far as quotations on the stock market are concerned, they are still much more influenced by fears rather than by facts.

For example, as we predicted in this column last month, second quarter corporate earnings reports are making very pleasant reading indeed for those investors who are paying attention to them.

Naturally, there are exceptions. Here and there there have been dividend cuts and a few omissions, but they are not important. Some of the showings compared to the second quarter or the first half of 1952 are quite extraordinary. This too was to be expected because last year there was a steel strike. It will be argued that the second quarter earnings are history and that while business was prosperous the future now is cloudy. It is true that six months ago many commentators were willing to admit that the first half of 1953 would be good, but they predicted a decline in business volume after July 1st. Now they have pushed forward once more the date for the beginning of leaner times. While they are being forced to admit that the third quarter will also be very satisfactory, they still contend that towards the end of the fourth quarter there may be some let-down. This type of prognostication has been very fashionable for as long as five years. There is generally a readiness on the part of many observers to acknowledge the existence of present prosperity, but they predict an early termination of it. These are the professional wolf criers, but unlike the fable the time for final disbelief in their claims does not seem to arrive. We venture to state that when September comes around it will be predicted that the commencement of recession will once more have to be postponed until 1954.

A really bright spot continues to be the output of electric energy. It was formerly the case that weekly output records were likely to be broken, if at all, in the latter weeks of December because of the shortness of the days. Christmas activity and allied reasons. Just now the record output of 8.460,427,000 kilowatt hours for the week ended July 25th was ascribed to the hot spell and the tremendous demand for energy to run air conditioning and refrigerating equipment. The increase in the use of electricity from a year ago was 15.4% for the United States as a whole, but the Central Industrial and the Southeast regions each showed a gain of over 20%. Naturally, the profits of the electric utility group have been excellent, but per share earnings have quite frequently not reflected this because of ad-

ditional common stock financing which many companies have been obliged to do in the past six months.

Since the end of the second quarter there has been a firmness in the price of lead, steel scrap, petroleum, a number of important chemicals and certain household appliances. On the other hand, there are signs of a let-down in special groups, notably farm implements.

On an overall basis the shares of leading corporations are not at a high level in comparison with current earnings and dividends. The Dow-Jones Industrial Average comprising 30 stocks yields at 272 approximately 6% on current average dividends of about \$16.00. With respect to yields, there is no such thing as a normal, yet a 6% return from dividends that are on the whole very well protected shows the absence of any excesses. Certainly there is no boom. At the peak of 1937 bull market when the Dow-Jones Industrials reached 194.40 the yield, similarly computed, was 3.75%. When the Average reached 212.50 on May 29, 1946, just before the decline in quotations which lasted for years, the yield was 3.24%. At the 1953 high of 293.79 reached early in January the yield was 5.45%. Moreover, the spread between the yield from good stocks and high grade bonds is not far from 21/2%, which we may regard as favorably ample.

We do not look for any marked decline in the quotations for common stocks in the near future. Even if public psychology continues to be affected by depressing influences, the same fears and uncertainties cannot be discounted over and over again for there must inevitably come a time when any given set of influences, no matter how potent, will have run their course. Just when and where the point of diminishing returns will be found is hard to predict. Technically, the securities markets seemed to have reached a sold-out condition about mid-July. Failure of stocks to decline immediately after the true bears some testimony in this direction. Any bit of good news would come as a windfall. In the meantime, December 31st, when the Excess Profits Tax will expire, draws nearer daily.

Lone Star Begins Integrated Operation

ONE Star Steel Co., 30 miles north of Longview, has begun integrated operations on a limited scale, according to E. B. Germany, president.

The first oil field casing produced entirely from East Texas iron ore in one continuous operation has come off the production line at the plant.

It was another in a series of historic events at the E. B. Germany Works, as one part after another of the \$90,000,000 expansion program has been put into test operations in recent weeks.

The No. 1 pipe mill was tested several weeks ago and since that time has been turning out steel pipe for oil field use from purchased skelp while breaking-in operations continued.

The No. 2 open hearth furnace was put into operation early in June and has turned out 20,000 tons of ingots, most of which have been sold to the account of the A. O. Smith Corporation of Houston.

The No. 3 open hearth furnace also is now in production of steel, and the No. 1 and No. 4 open hearths are expected to go into production in the near future.

The slabbing mill, which rolls an ingot into a slab of steel, went into production on a limited basis on July 2, and the four-high mill has test-rolled its first sheet steel.

This steel sheet was carried right on through the No. 1 pipe mill where in a few hours it became finished steel casing for oil field use.

These various processing steps—from the raw ore through the works to the finished steel product ready for use compose what is known in the steel industry as "integrated" operations.

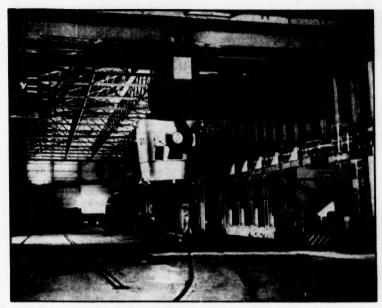
The Lone Star steel operations still are on testing and break-in schedules. The No. 2 pipe mill and certain other new facilities are yet to be completed and tested.

But there was no mistaking the gleam in the eyes of Lone Star officials as they watched the first casing made from East Texas ore roll off the finishing line.

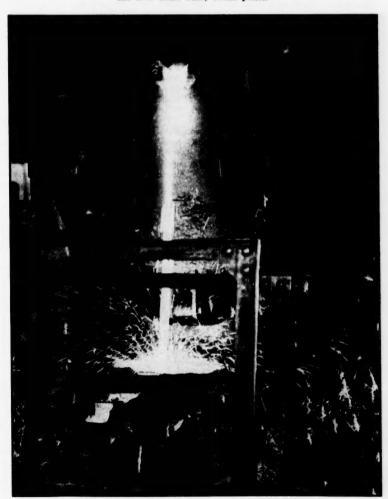
It was the forerunner of full operations, expected to be achieved sometime in the near future, when an estimated 400,000 tons annually of finished steel tubular goods will be coming off the production lines for use in oil field operations in the Southwest.

Although officials have not ventured to set a date when the complete new steel facilities will be in full-scale production, it is apparent this goal is getting close at hand.

It is estimated Lone Star Steel will employ 3,000 or more persons when the complete facilities are in full scale production later this year.



View down the charging floor showing the four Rust open hearth furnaces at the new Lone Star, Texas plant.



Ponderous ladle cars move the hot metal from the blast furnace to the pig machine for pouring into molds, as shown above.

What does new industry mean?

By Caldwell R. Walker

Business Trends Editor

WHAT does a new industry mean to a community?

This interesting question is intimately related to a chart which was reproduced in MANUFACTURERS RECORD quite a number of years ago, reprints of which have been, and still are, requested in great number.

Authority for the chart is unknown.

When first published by the RECORD, credit was given to the Economics Department of a prominent Midwest university.

The University in question, however, has recently stated that it has no record of original publication.

Be the authenticity what it may, it is obvious that the chart was not published without considerable research, and that it serves a very useful promotional and inspirational purpose.

It is also obvious that production of the chart occurred in an era entirely different from the present one—most probably in the early nineteen thirties.

As most RECORD readers know, the chart is captained as follows:

"What an Industry Employing 150 Men Would Mean to Your Community."

The chart shows in pictorial form that such an acquisition by a community would provide:

A Plant Investment of \$200,000; An Annual Payroll of \$500,000; 33 Retail Stores; The Support of a Thousand People; A 22 Room School House and 18 Teachers:

Public Improvements:

Sales and Service for 400 Cars:

\$100,000 Annually for the Railroads; Opportunity for 24 Professional Men; A Taxable Valuation of \$2,500,000;

Yearly Markets for \$350,000 in Agricultural Products;

An Annual Expenditure in Trade of \$1.5 Million.

In analyzing the chart, it is assumed that the term "industry" is meant to imply a factory of some sort, since it is doubtful if any ordinary community could well absorb and maintain any other type of industry employing as many as 150 persons.

As of today, the average manufacturing plant in the United States has a Plant and Equipment Value of \$186,000.

This, of course, does not take in all working capital, for it does not include inventories, accounts, cash, or investments. The \$186,000 is the amount of tangible property that would be subject to ordinary property tax assessments.

The average factory of today employs about 54 persons, and that average has held fairly steady now for a good number of years. In 1929, average factory employment was around 50, and at the depths of the depression was around 56. So, the plant pictured in the chart

would, under practically all conditions, be about three times as large as the average American factory.

For further discussion of the subject it will be most convenient to stick to average plant figures, and if comparison is desired with the data of the chart, the average figures can all be multiplied by three.

The payroll of the average American factory runs about \$202,000 annually.

Total income derived, including profits before taxes, amounts on the average to \$291,000.

Now, what do these figures mean in terms of other industry — say Retail Trade, for instance?

Today, there are about 1,700,000 retail units in the United States, and there are a total of about 313,000 manufacturing plants in the country.

If it were to be assumed that factories were the sole support of retail units (an unsound assumption to say the least), one average factory would support but 5.4 retail outlets, and the plant of 150 persons would support no more than 17 such outlets. The chart pictures 33 retail stores being maintained by the 150-person industry.

It must be borne in mind throughout the discussion that data being presented are today's averages. Special situations might be found or devised that would bear out a wide variety of assumptions.

In 1933, for example, there were 1,-526,000 retail units and but 142,000 manufacturing plants, this being an average of 10.7 retail units for each factory, a prorata almost double that of today.

Going back a bit farther, however, to the year 1929, there are found 1,710,000 retail units and 210,000 manufacturing plants, a ratio of 5.5 to 1, or about the same as today.

Here is probably the most potent argument producible that retail units are not anything like completely dependent upon manufacturing industry for existence.

Between 1929 and 1933, more than 30% of all factories went out of business, and during the same period only 10% of the retail units fell by the depression way-side.

But all this is beside the point.

The heart of the matter is that a new factory, be it large, small, or average, is the surest and quickest way to absorb surplus labor and there raise community income.

And the measure of such increase in income is to be found directly and solely in amount of payroll and profit derived from the new factory.

All payroll and profit will not be spent in the immediate community in which it is produced, but it can be safely figured that not less than 75% of payroll will be spent at retail, 6% for consumer utilities, 7% for rent, insurance and other finance items, and 10% for professional and personal service.

Profits may or may not be spent in the community depending upon the headquarters and type of business.

And if there is anyone who does not believe that an average payroll of \$200,(Continued on page 52)

"I should say it was a good promotion! Now, the office force laughs at his jokes!"

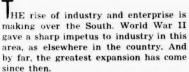


The Seven Missing Keys

By Robert S. Lynch

President
Atlantic Steel Company

(Reprinted from an address recently delivered by Mr. Lynch at Jacksonville, Fla., before the American Steel Warehouse Group.)



Of the twenty-six billion dollars expended by the government and by private industry for wartime construction, the South has received some four and a half billions. The area's plant capacity has been nearly doubled. Furthermore, for every million dollars spent on new plants, some fifteen millions have gone into sprucing up existing industries.

But perhaps the most amazing fact of all is that the sharpest rise in Southern industry has come since the end of the war. The trend lines are headed sharply up, and still going.

New business enterprise has been created all around us. Our payrools are heftier. A new prosperity is developing.

Steel has helped spark this prosperity. Steelmaking in the South has increased nearly 70 per cent since 1940.

Of vital interest to all of us is the evergrowing metal-working industry. Metalworking plants in the South did roughly six and one-half billion dollars worth of business last year and should reach for a goal of at least ten billion dollars in 1960. The last decade saw over 900 new metalworking plants start up in the South and it is a reasonable certainly that hundreds more will begin operations here within the next few years.

The South is no longer an insular, agricultural community.

With the rest of America, we are looking outward—beyond the boundaries of Dixie, beyond the boundaries of America itself.

We are an integral part of an entire world pattern. We are dependent upon the rest of the world today, as the rest of the world is dependent on us.

It is only by realizing this—by understanding foreign relations, and cultivating international friendships — that we

shall be able to continue our growth in America, that we shall be able to stop the march of aggression that threatens on every horizon.

Our problem is a practical and immediate one.

There was a time, particularly in the great industry of steelmaking, when America was largely self-contained.

Pittsburgh was a great steelmaking center. Steelmaking developed there because conditions were right. There was plenty of limestone, coal, and water at hand. All of the big markets were within an overnight run from Pittsburgh.

Iron was not far away—at the head of Lake Superior was the great Mesabi range. It promised us all the iron we could possibly need for any foreseeable future. Transportation was easy — just bring the boats down through the Great Lakes.

Today things have changed.

Today the Center of Gravity of Steel has shifted.

Today iron and steel is made or finished in 30 states. Some 400 steel plants are located in 250 communities. As the steel output grows in the new centers, the steel-consuming industries move in—the auto makers, the appliance makers, set up their assembly plants nearer to the new sources of supply. Other steel fabricators and consumers move in. New populations grow. New markets are created.

America grows. Population and industry are spread out more evenly across the country. Our industrial strength is decentralized. And in the atomic age when a hydrogen bomb can destroy entire cities, decentralization makes sense.

As we become less vulnerable in one regard, however, we become more vulnerable in another. Our iron ore supply in the Lake Superior region, while it is far from being depleted, is also far from being abundant.

About 65 billion tons of iron ore remain in the Mesabi area, while about 11

billion tons are in the Southern reserves. With the Northeast with three and the West with one, that makes a total reserve of approximately 80 billion tons.

But, only six billion of the 80 represent ores containing over 35 per cent iron. Beneficiation of lower grade ores has resulted in some excellent tonnages, but taconite will not be used by the steel industry on any large scale unless we are fenced in by a pretty large shooting war.

Meanwhile, American need for steel expands. We have reached the incredible production figure of 120 million tons of steel per year. And the Paley report has estimated we shall need some 200 million tons a year by 1975. Even that estimate could be on the conservative side.

The steel industry must always be farsighted in making plans for that longterm future. We need economical ores. The cities of America, our transportation systems, our factories, our products have mushroomed in large part because of the cheapness of steel.

We are developing new iron ore resources.

In the Labrador-Quebec area, the industry has found important deposits, some 400 million tons, with good prospects for even more. In Venezuela, the deposits are rich and plentiful—60 to 100 million tons, and we'll start getting some of that ore before the year is out.

The Bomi mountains in Liberia, Africa, are now producing good iron ore, but to get there one must cross 38 miles of jungle, and reckon with huge rainfall, three rivers, no port. It has always been the genius of industry that problems are merely challenges to greater efforts—to courage and ingenuity.

These foreign ores, however, don't enjoy the comfortable security of our own home ores, which we can float down land-locked, inland waterways. During a war, the northern Atlantic to Labrador would be no fun, nor would the Caribbean or our own coastal waters on the trip to Venezuela. And to Africa and



return, you travel 8,000 miles of open sea. If we were ever again to engage in global warfare, and had to depend on these foreign ores for our steelmaking supplies, we'd have a serious problem of protection on our hands.

But there is another phase of our raw materials supply problem that poses, perhaps, even more vital problems. I am talking about the alloying ores that are absolutely vital to make the steels we require for our modern machines. Seven of them we call the "Seven Missing Keys to Abundance," because we rely on imports to meet our requirements.

Our steels of today are not the steels of earlier American history, but special steels designed for a multitude of special purposes. Without them we cannot carry on our particular kind of circlinaters.

These seven missing keys are: manganese, vanadium, chromium, cobalt, columbium, tungsten, nickel. Useful, but not as important as these seven are molybdenum, titanium, zirconium, and germanium.

And look how steel requirements for these elements have changed in the past few years. The use of cobalt has increased some 235 per cent since 1946; vanadium 160 per cent; columbium 128 per cent; chromium 87 per cent; molybdenum 77 per cent; titanium 42 per cent; and nickel 11 per cent.

Of the seven missing keys, mentioned a moment ago, we must import between 50 and 100 per cent of what we need.

From this aspect, we are a have not nation. It's not a mere figure of speech to say that our economy, our high state of civilization, our war potential and security, depend upon the continued availability of these seven metals.

Where do they come from?

Cobalt—practically our entire supply—90 per cent of it—comes from Africa, the Belgian Congo. That is very far away, across a lot of ocean.

Chromium comes from South Africa and Southern Rhodesia. Marshall Plan aid funds have aided in bringing smaller quantities of this important element out of Cuba, the Philippines, and Turkey.

Columbium comes from Africa-from Nigeria and the Belgian Congo.

Vanadium—we produce two-thirds of what we need, but the important balance must come from Africa and Peru.

Tungsten—all of it once came from China and North Korea, but those doors are closed. We are forced to turn to such scattered sources as Siam, Japan, Peru, and Brazil.

Nickel—Vast quantities of nickel are used in this country and historically we have imported it all from Canada. Recently, a great nickel plant in Cuba that served us during World War II has been reactivated and is now producing for us. The great bulk of it still comes from Canada, though.

Manganese—(And now we get closer to the problem.) Manganese used to come from Russia. Until about two years ago, Russia furnished fully one-third of our requirements. But the Soviet is now our declared enemy, and those doors are closed. New sources had to be found. We

turned to India, to the Union of South Africa, and the African Gold Coast, to Brazil and Cuba. India and Africa furnish about 90 per cent of our requirements.

So many countries! Such vast expanses of oceans! Such extended sources of supply of such small amounts of material! Yet these seven alloying metals are truly the very foundation of all the things that go to make up what we are and what we hope to be.

The nation, of course, is stockpiling these materials. This has been going on diligently for a number of years. Let us hope we have enough of these materials on hand to see us through many months of dark days.

Naturally, we are constantly hunting for substitutes. The use of boron steels, for example, has proven one effective way of economizing on the use of certain of the precious imports.

We are conserving and we are using all the latest advances in our scientific knowledge to pry into the atomic structure of steel. Maybe a day will come when we are so advanced in our understanding that we will be able to produce all the types of steel we want without recourse to these Missing Keys to Abundance.

But right now, any piece of steel which your warehouse delivers today, in response to some hurry-call over the telephone, might well have a label attached to it, reading: "Partly sourced in South Africa; or in the Belgian Congo; or in Turkey, Siam, or Peru." Or the label might read: "Mined in part by hungry men in India, Africa, Japan, or in the Philippines."

Nowadays the average man reads and hears the news with a map of the world close by—that is, if he wants to keep up with fast-moving events.

In these days of new succession in the Soviet, we are scanning the papers daily for the least hint of what the fat-jowled Malenkov will do with his new government. We are asking ourselves whether Mao of China will fall in behind Malenkov, and we have the tentative answer that he will.

We ask ourselves what Nehru of India will do. To what extent will he maintain his insecure neutrality? No wonder if the people in the State Department are doing everything in their power to maintain friendship with India.

We watch South Africa. It has Indian troubles. And Afrikander and Mau Mau problems, too.

We watch South America, and possible Communist infiltration.

What can we do about it?

We can be more careful of our human relations with the peoples around the world—people whose territories are vital roots of supply for our own industry—people who produce for us, who start vital supplies on the way to us.

The visitor to Africa and India who brags about American bathtubs, home freezers, and autos should pause a moment and realize that without the hard labors of these natives digging up the manganese, cobalt and chromium for

use in making the atricles, he would have nothing to brag about.

We know something of the backwardness of some of these proud human beings. We learned it here at home in our own industrial civilization. And they are proud human beings, make no mistake. Many, as in India, have a culture and a written literature far older than our own. When the Soviet agents talk to them, they say, "You have nothing to lose but your chains."

We know that in India, whole families dig and transport manganese. The father rakes it out of an open pit with a crude mattock, the mother and children load it into baskets, and carry the baskets on their heads.

Their wages amount to only a few cents a day. Before the war a man could earn perhaps 15 cents for ten hours' work—and women and children even less.

In Africa, production is not much different, in human terms. Native blacks are herded together to mine manganese for us, both in South Africa and the British territory called the Gold Coast. In both areas the large colored population is ruled by small European minorities. The work in the mines is hard. The pay is small. The field is fertile for the development of native unrest.

We have a new dependence on the friendliness of other peoples, whose territories we are now mining!

South Americans, in lands like Venezuela, do not feel so close to "Yanki people," as they call us down there. We have seen recently, in connection with oil, how quickly misinterpretations of our Yanki work and projects can fan latent passions, and perhaps become backgrounds to demands for nationalization. The winds that are blowing in Iran are by no means limited to the Iranian boundaries.

And in Liberia, the tribes of the Bomi Mountains are still in a spear-and-arrow civilization, easily influenced by witch-doctors—including Soviet witch-doctors. They have carried on territorial feuds for 30 years. But these neo-savages are now the miners of the Liberian ores. We are dependent on their good will and cooperation to get the ores out. Obviously, then, we must not make mistakes and lose that good will, leaving them a prey to enemy infiltration.

These are human situations that must never be forgotten, which must be handled with continuing tact and understanding — and even self-effacement, which is one of the most difficult things Americans have to learn.

The Point-4 Program of our foreign policy was set up to help these backward, under-privileged countries. The millions spent on this foreign aid program is some degree of insurance of a continued flow of these important alloying metals.

Such is the situation in many parts of the globe—areas in which we now have a vital stake. We can't afford to blind ourselves to these facts.

One of the best auguries for the future, and for the protection of our way of (Continued on page 52)

Electric furnaces challenge the open hearth

HE steel industry could save many millions of dollars annually as a result of a two-year research project just completed by fourteen electric utility companies and Bituminous Coal Research, Inc., the national research agency of the bituminous coal industry.

Approximately 83,000,000 tons or 89 per cent of total United States steel is made in open hearths. Most of this is low-carbon steel. The electric utility industry and the coal industry, knowing that both would benefit materially if electric furnaces replaced open hearths, joined forces to conduct a comprehensive technical-economic study to discover whether the electric furnace could compete with the open hearth for this major part of the Nation's steel production.

They discovered that replacing open hearth furnaces by electric furnaces could, (1) decrease the cost of making low-carbon steel from cold metal up to \$3.15 per ton, (2) increase the national output of electricity by 12 per cent, and (3) increase coal production about 25.000,000 tons a year. The latter two estimates assume a total replacement of the existing 950 open hearth furnaces by 760 electric furnaces. Even a 10 per cent switch to electric furnaces in the near future holds tremendous importance to the industries concerned.

Three plant sizes were studied—250,-000 tons, 500,000 tons, and 1,000,000 tons of annual steel production.

Only the most modern open hearth installations were used for the study. No plant more than eight years old was included. Costs shown for open hearth operation are the lowest which have been achieved or which the steel industry considers to be possible. For the electric furnace, costs have been used which are conservative and beyond challenge. Three representatives of the steel industry advised on the collection of data and preparation of the final report.

Up to the present, electric furnaces have been used primarily for the production of special alloy steels. During World War II, electric furnace steel-making expanded to supply increased demands for high quality steels. At the end of the war, demands for these steels declined and excess electric furnace capacity led some manufacturers to experiment in using this equipment to manufacture low-carbon steel. About the same time, important developments and improvements in equipment, such as the swing roof, high rates of energy input, and increase in furnace size, took place. These improvements reduced charging time, decreased melting time, and lowered current consumption. As a result, important economies were achieved which brought electric furnace steel-making costs to the level of the open hearth process.

An 80-page report on the project shows that capital cost for electric furnace installations is only 60 per cent the cost of open hearths; that the cold melt steel-making process using scrap and pig iron shows lower cost for the electric furnace, and that electric furnaces show a greater annual return on invested capital. For the 50 per cent hot metal-50 per cent scrap metal process, annual return on invested capital with the electric furnace is equal to or greater than the open hearth. The study and report were based on full capacity operation. Less than full capacity operation would tend to favor the electric furnace because fixed costs are lower.

In addition to reduced capital investment, and reduced cost of steel production in cold-melt practice, the electric furnace offers steel company management other important advantages over the open hearth.

The electric furnace is more flexible. It can be put into production or withdrawn at will while the open hearth must be fired even when idle in order to protect the brick work.

Electric furnaces can be kept in operation all but about 15 days a year while open hearths are usually down about 30 days. Rebuilding time is shorter for the electric furnace.

The yield of the electric furnace is about 2 per cent greater than the open hearth for the same amount of materials. The electric furnace gives greater control of sulfur which is important in the production of high-quality deep drawing sheets and welding grades of steel.

Because of its better temperature control the electric furnace saves time in steel production. Nitrogen control by the electric furnace is expected to match that of the open hearth.

Open hearths are fired primarily with liquid and gaseous fuels; electric furnaces operate on power usually generated from coal. Future changes in costs of fuels and metals used by the electric furnace and the open hearth are expected to favor the electric furnace.

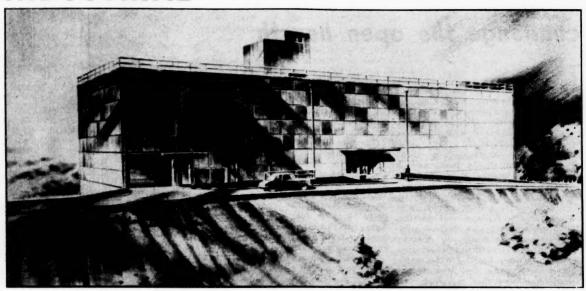
The project report contains detailed tables showing not only costs, but also operating data—pounds, gallons, manhours, etc.—so steel companies can readily apply their own operating and cost data to evaluate electric furnaces versus open hearths for their own plants.

Manufacturers who supply or service the coal, electric, and steel industries also stand to increase sales by many millions of dollars. For example, the 25,000,-000 tons of coal needed annually for generating the additional electricity would mean \$25,000,000 worth of mining equipment. This tonnage means millions of dollars in freight revenue to the railroads and other transportation companies. Supplying power for the electric furnaces for the maximum potential steel tonnage would mean installation of 19,-000,000 kilowatts of additional capacity. To build and equip these power generation facilities would take an investment of \$3,000,000,000, not including transmission. The electric furnace installations would mean over a billion dollars in sales to manufacturers of furnace and auxiliary equipment.



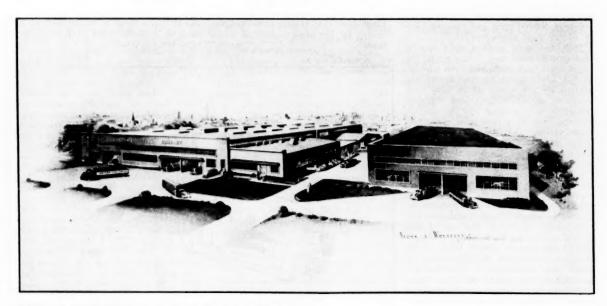
"Don't bother your father. He's had a hard day at the office picnic"

INDUSTRIAL



IN MARYLAND

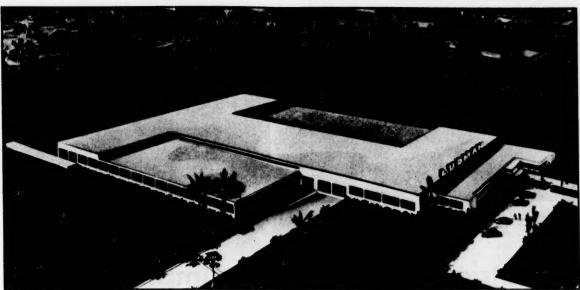
New laboratory at the Chesapeake Bay annex of the Naval Research Center located at Randle Cliff, northern most of Maryland's famed Cliffs of Calvert. Concrete and fiberglass panels will be used for the walls of the 60 by 200-foot structure.



IN NORTH CAROLINA

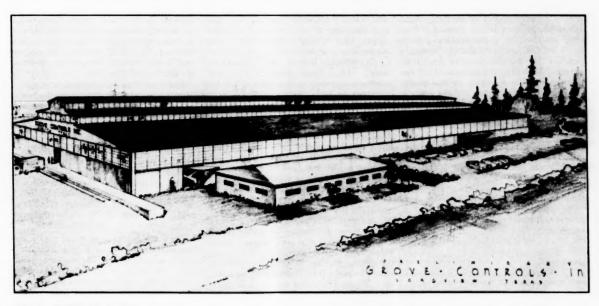
Edgcomb Steel Company is expanding its facilities at Charlotte to meet the ever increasing demand in that area. Architects for the new structure are Sloan & Wheatley of Charlotte. Contractor on the job is Southwestern Construction Company.

EXPANSION



IN FLORIDA

This new window manufacturing plant has been constructed by the Ludman Corporation at Miami. It covers a floor area of 140,000 square feet, and includes complete facilities for the manufacture of windows and jalousies from raw material to finished product.

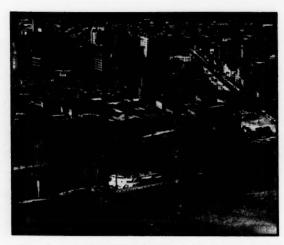


IN TEXAS

Sketch of the new plant of Grove Controls, Inc., under construction near Longview. This new facility will turn out equipment for oil well and pipeline operations. The project will cost several million dollars and will be in operation early in the fall.



Ship berthed in foreign trade zone at New Orleans. Goods can be brought here, stored and then reshipped duty free.



The S. S. Del Norte of the Delta Line tied up at New Orleans. Sailings are to South America and Africa.

Industrial Boom Spurs Port Improvements

By Sidney Fish

HE rapid industrialization of the South during the last 12 years has given rise to an important port modernization and improvement program throughout the South Atlantic and Gulf States. As a result, industry in the South is now able to take advantage of the finest and most modern port facilities in the nation at nearly twenty important ports.

The decentralization of industry which has taken place in recent years has thus been matched by a comparable growth in Southern port facilities. Tonnages handled by Southern ports has been growing by leaps and bounds. With the location of new industry in the South, and with sharply higher freight costs it was obviously uneconomic for the area to use the older facilities in the north, for shipments overseas, for imports, and for commerce among the states. The expansion of agriculture in the South, as well as in the entire Mississippi basin, which can best be served by Gulf ports, has thus stimulated Southern cities to install better docks, terminals and handling equipment.

The St. Lawrence Seaway proposal is a threat to Southern ports, but the seaway will be fought vigorously by Southern cities and states for it would divert part of the rich grain traffic to Great Lakes port.

The biggest stimulus to the growth and modernization of Southern ports came as a result of World War II. The investments were largely made by the Army and Návy. When the war ended, the Government had placed many of the Southern ports in shape to handle much larger tonnages of cargo. And the installations were of the most modern kind.

Since the war, Southern cities and states have recognized the wisdom of continuing to expand and improve port facilities. It is estimated that altogether,

several hundred million dollars has been invested in new facilities, and state legislatures, city councils, port commissions and others have continued to draw plans for new improvements. They recognize that in many cases, the location of modern mechanized port facilities within a state will often swing the balance in favor of a Southern location, because it will assure efficient, prompt and low cost handling of imported and exported goods. This is particularly true in the case of the new Southern industries such as chemicals, rubber and machinery which enjoy large markets for their products not only in Northern cities but overseas as well.

The rapidly growing large warehouses and wholesale distribution centers of national manufacturers springing up in the 'South are assured of low cost handling of their goods as a result of the expansion of Southern ports.

Close to 30 per cent of the nation's water borne exports was accounted for by Southern ports last year. Import totals too, rose sharply, and comprised about 15 per cent of the nation's total. In contrast with some Northern ports, where labor difficulties are often grave, the Southern ports are in many cases newer and better equipped.

Leading the list of Southern ports in dollar value is New Orleans, which today enjoys a well balanced export and import trade. Last year, cargo handled at its wharves had a value of \$1.5 billion. New Orleans today ranks second only to New York in the value of its exports and imports. During the first half of last year, New Orleans passed New York and became the leading banana importing city. In addition, the port ranked second in imports of several commodities—burlap and jute bagging, coffee, sisal and jute.

New Orleans, long the leading exporter

of wheat flour, retained this position. And it stood third of all the ports in the nation in its exports of agricultural machinery, as well as in overseas shipments of vegetable oils, cotton, corn and fats. An extensive inland waterways system links New Orleans with many states, and nine trunk line railroads also serve the city. To assure continued growth in the port's trade, large sums are being invested. These will provide for the construction of a new public grain elevator, to cost \$7\$ million, and eightyone large storage bins, to be finished by the end of this year.

The total current program, costing \$12 million, includes a new public commedity warehouse wharf, to cost \$3.5 million, and reconstruction of a wharf, to cost \$1 million. It will require two years for completion.

As foreign trade becomes more competitive, low cost port facilities are of untold advantage to the South. For a larger proportion of foreign trade will tend to go through those ports which can handle it most efficiently. Hence the South will hold on to its waterborne traffic better than northern cities.

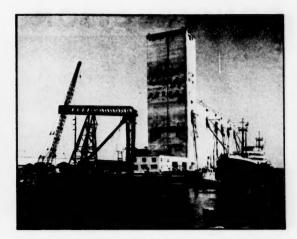
Plans are being pushed for a straight line channel to the city from the Gulf, which would reduce the present route from 110 miles to seventy miles. This would mean extensive savings for each ship entering the port.

Along with a new port area, to be built at the top of the new channel, the entire New Orleans channel program will involve close to \$50 million. The financing remains to be arranged, but it is hoped that the Federal Government will provide about two-thirds.

Industrial investments in the New Orleans area since 1945 total over \$700 million. Many of these facilities have been



Ships at Port Tampa, Florida, one of several growing ports in the state, are here awaiting cargoes of phosphate to be loaded at the rate of 29 tons per minute.



New grain elevator at the State Docks at Mobile, Alabama, boasts a capacity of almost a million and a half bushels of grain. Cost—\$3,500,000.

located at New Orleans because of the extremely low cost of handling freight at its docks.

New Orleans is only one of the many growing ports which serve the South today. The list includes Baltimore, an important handler of ore imports and coal and grain exports; two cities in North Carolina, Wilmington and Morehead City; Charleston, S. C.; Savannah, Ga.; Tampa, Miami and Jacksonville; Mobile, Ala.; Lake Charles, La., and a string of rapidly expanding Texas ports—Galveston, Brownsville, Houston, Texas City, Port Arthur, Orange, Corpus Christi and Beaumont.

Galveston, which leads all American ports in exports of cotton, sulphur and grain, is expected to take the lead in opposing Federal support for the St. Lawrence seaway proposal. The city, with its natural port, has long specialized in dry cargoes, although other cities in Texas have grown rapidly in recent years by concentrating on handling petroleum and pretrochemical products.

The well-equipped port facilities and switching lines make it possible to speed the movement of freight cars from five trunk lines to the Galveston docks for quick unloading. Locomotive hoists, a fleet of modern lift trucks and other equipment has been purchased. Over \$7 million has been invested in modernization of the port facilities by Galveston wharves and others.

Because of the excellent port facilites, plans have been discussed for developing Pelican Spit and other areas in Galveston Bay, by attracting new industries. But even before the entrance of such new industries, Galveston's trade has increased nearly 2 million tons to 7.9 million tons in the last six years.

Houston has important port development plans, including a \$6 million bond issue for several port improvements, and a proposal that the U. S. Corps of Engineers widen and deepen the channel that extends 50 miles from the city into the Gulf of Mexico.

The industrial expansion of the Southwest is contributing directly to Hous-

ton's growth as a port. Formerly petroleum products were the principal commodities handled by Houston. But with the development of new big chemical, steel and machinery industries in the area, Houston is getting a more diversified flow of goods. Tonnage handled at Houston has risen nearly 50 per cent to over 45 million tons since 1946. Exports still predominate, but imports are growing much more rapidly than the exports. Since 1946, imports into Houston have increased from 200,000 tons to nearly 2 million tons. Ships from all over the world enter the Houston ship channel.

Texas City, whose port is privately owned by the Texas City Terminal Railroad Co. (jointly owned by several Southwestern railroads) has more than regained the ground lost by the big explosion of 1947, which wrecked some port

facilities. Last year, the port handled 18 million tons, as against only 13 million tons before the explosion. The rapid growth of the big petrochemical industries in this area has led to important expansion of the port's business, which is primarily domestic.

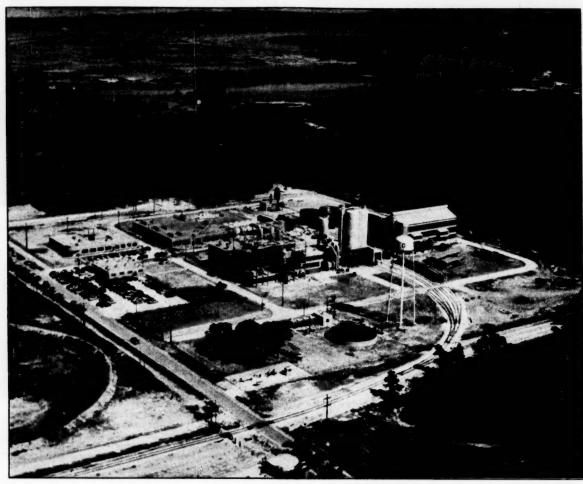
Brownsville is another Texas port which is showing large gains. Since 1937, freight handled at this port—chiefly cotton and citrus fruit — has showed a twenty-fold gain.

In the Southeast, the \$6 million invested in new docks for Savannah has placed that port in a position to become one of the most important in the nation. The expansion of this port will be of inestimable value to the rapidly growing industrial area served by Savannah, just as Mobile's investment in new facilities will aid all Alabama industry.



"And now, for my impression of our dear employer returning from another arduous trip ..."

CONSTRUCTION



New \$7,000,000 catalyst plant built at Lake Charles, Louisiana, by the Consolidated Engineering Company, of Baltimore, for the Davison Chemical Company.

July Awards Total \$286,707,000

By S. A. Lauver News Editor

OUTHERN construction, as reported 000 for industrial work. Four of the in the daily bulletin of the MANUFAC-TURERS RECORD, totaled \$286,707,000 in July, bringing the figure for the elapsed months of the current year to \$2,338,-210,000.

The July aggregate represents a decline of forty per cent when compared with the 1953 peak established in the preceding month. Also down is the \$2,-338,210,000 for the seven months, which have registered a decrease of about forty-one per cent, when compared with the similar period of last year.

Components of the July total were \$88,972,000 for public building; \$63,216,-000 for private building; \$62,303,000 for highways and bridges; \$45,967,000 for heavy engineering projects and \$26,249,-

figures represent decreases; the otherhighways and bridges-an increase.

Public building, with its \$88,972,000, shows a drop of twelve per cent. The total includes \$50,321,000 for schools, which were valued eleven per cent below the June level.

Private building in July totaled \$63,-216,000, as compared with the peak \$100,-432,000 recorded in the preceding month. While residential work declined drastically to \$25,500,000 and office building by twenty-nine per cent to \$10,202,000, two of the categories-assembly building and commercial work-increased. For the first with its \$17,426,000 total, the rise was seventy-three per cent: for the second, total \$10,088,000, ten per cent.

Highways and bridges in the contract stage struck the only encouraging note during the month. The \$62,303,000 for the sixteen states below the Mason and Dixon line was almost three per cent ahead of its June counterpart.

Heavy engineering construction in July amounted to \$45,967,000. Down nine per cent, the total was made up of \$23,409,-000 for dams, drainage, earthwork and airports; \$16,247,000 for sewer and water work, and \$6,311,000 for federal electric projects. Sewer and water work shows an increase of fifty-nine per cent. The dam-drainage-earthwork-airport total dropped eighteen per cent; government electric work, forty-five per cent.

Most precipitous was the decline in the industrial field. The \$26,249,000 for July was but a fraction of the \$167,232,000 for the preceding month. This, however, was a peak for the year. Other months during the first seven ranged from \$31,808,-000 to \$112,055,000.

The \$2,338,210,000 total of southern construction for the seven months, as compiled from reports in the daily construction bulletin, does not support the optimistic predictions made at the beginning of the year. Some authorities say a drop throughout the country was expected at midyear and may continue during the rest of this year.

Public building stands out as the largest component in the five categories of construction. The \$574,740,000 for this type of work is about eleven per cent below the value set for similar construction in the first seven months of last year. Included in the current figure is \$299,632,000 for schools, this a fifty-eight per cent rise over the total for schools in the comparable period of 1952.

Industrial construction is the field where the most drastic drop has been recorded. The current seven-month total is \$524,423,000. At this time last year, the value stood at \$1,982,784,000. This difference accounts for much of the decline in the value for southern construction.

Private building in the seven months totals \$457,722,000. While the figure is six per cent below its 1952 counterpart, three of its components show rises. The \$76,-363,000 for office building is about two and one-quarter times larger than the figure for such work in the seven months of 1952. Commercial building with its total of \$59,343,000 is up one hundred ten per cent. The \$57,289,000 of assembly building shows a rise of nineteen per cent.. Residential construction accounted for the decrease in the private building total. For of the current seven months the total was \$264.636.000. The comparable figure last year was \$388,467,000.

Highways and bridges constituted the lone category where relative stability has been maintained, when comparing with the first seven months of last year. The current \$400,431,000 is practically the same as the figure for the similar period of 1952. In fact, the decline is about one and six-tenths per cent, a figure that would be cut down to smaller proportions by late bid openings for which reports have not been received.

Heavy engineering work in the seven months has totaled \$380,894,000. The decline of fifteen per cent was in the dams, drainage, earthwork and airport field, where the figure was \$223,975,000 as compared with the \$325,951,000 for the first seven months of last year. Sewer and water work's \$92,756,000 represents a twenty-two per cent gain; federal electric work, total \$64,163,000, a twenty-five per cent rise.

Nationally, the cost of some construction is reported advancing. The American Appraisal Co. late in July said its cost index rose four points during the second quarter and has increased a total of six points since the first of the year, as compared with an eleven point rise in the same period of last year. The index is based on an analysis of materials and labor required for representative types of industrial building structures. It is based on "100" representing 1913 costs. The current figure is 573.

CONSTRUCTION



Acacia National Life Insurance Co. building at Washington, showing the new addition running 212 feet along the First St. side. Shreve, Lamb & Harmon, Associates, New York, Architects. Turner Construction Co., New York, is the contractor.

SOUTH'S CONSTRUCTION BY STATES

	July, 1953		Contracts Awarded	Contracts Awarded
		Contracts	First Seven	First Seven
	Contracts	to be	Months	Months
	Awarded	Awarded	1953	1952
Alabama	\$8,394,000	\$27,283,000	\$93,226,000	\$191,045,000
Arkansas	1,982,000	16,907,000	31,017,000	51,603,000
Dist. of Col.	975,000	10,980,000	33,102,000	33,652,000
Florida	50,801,000	34,430,000	219.506.000	310,658,000
Georgia	15,821,000	31,250,000	136,087,000	196,637,000
Kentucky	8,256,000	25,505,000	182,609,000	528,676,000
Louisiana	14,933,000	10,818,000	197,827,000	329,009,000
Maryland	22,557,000	27,173,000	173,526,000	237,238,000
Mississippi	3,016,000	10,600,000	48,713,000	76,331,000
Missouri	9,266,000	7,300,000	84,343,000	61,706,000
N. Carolina	16,058,000	146.033.000	119,389,000	175,808,000
Oklahoma	13,370,000	6,365,000	50,183,000	105,276,000
S. Carolina	11,309,000	13,190,000	87,489,000	132,688,000
Tennessee	16,187,000	38,193,000	113,496,000	618,077,000
Texas	57,193,000	87,260,000	494,856,000	686,665,000
Virginia	19,393,000	13,184,000	145,690,000	185,464,000
W. Virginia	17,196,000	17,800,000	127,151,000	61,473,000
TOTAL	\$296 707 000	8594 971 000	82 338 210 000	23 981 106 000

SOUTH'S CONSTRUCTION BY TYPES

	July, 1953		Contracts Awarded	Contracts Awarded
	Contracts Awarded	Contracts to be Awarded	First Seven Months 1953	First Seven Months 1952
PRIVATE BUILDING Assembly (Churches, Theatres, Auditoriums, Fraternal)	\$17,426,000	\$24,099,000	\$57,289,000	\$49,675,000
Commercial (Stores, Restaurants, Filling Stations, Garages)	10,088,000	17,492,000	59,434,000	28,112,000
Residential (Apartments, Hotels, Dwellings) Office	25,500,000 10,202,000	24,323,000 29,270,000	264,636,000 76,363,000	388,467,000 23,291,000
	\$63,216,000	\$95,184,000	\$457,722,000	\$489,545,000
INDUSTRIAL	\$26,249,000	\$206,500,000	\$524,423,000	\$1,982,784,000
PUBLIC BUILDING City, County, State, Federal and Hospitals Schools	\$38,651,000 50,321,000	\$35,364,090 52,160,000	\$275,108,000 299,632,000	\$460,267,000 189,160,000
	\$88,972,000	\$87,524,060	\$574,740,000	8619,427,000
ENGINEERING Dams, Drainage, Earthwork, and Airports Federal, County, Municipal Elec-	\$23,409,000	890,251,000	\$223,975,000	\$325,951,000
tric Sewers and Waterworks	6,311,000 16,247,000	8,127,000 7,884,000	64,163,000 92,756,000	51,106,000 75,636,000
	815,967,000	\$106,262,000	8380,894,000	\$452,693,000
ROADS, STREETS, BRIDGES	\$62,303,000	\$28,801,000	\$409,431,000	\$106,957,000
TOTAL	\$286,707,000	\$524,271,000	\$2,338,210,090	\$3,981,406,000



The Kappa Delta House at the University. The entire executive development program will be conducted here.

UNIVERSITY OF GEORGIA'S

Executive Development Program

THE South's long awaited industrial boom has brought this section much of the prosperity for which it hoped and has given industry the expansion opportunities for which it waited, but it has brought along with it many a problem for which there is no easy solution.

The South for years now has been hailed by Southerners as industry's land of opportunity where the climate is right, raw materials abundant, and the labor supply both plentiful and accomplished. But industry in the South, like industry everywhere, is now faced with a personnel problem which only time and special training can solve.

This problem is that of a shortage of executives capable of taking over top management positions. It's not for lack of brain power and potential ability that the shortage exists; it's due largely to the fact that as industry has become more specialized, it has produced plenty of executives who are qualified in a single area, but far too few men who can one day take over that industry's general management and form its over-all policies.

That industry does have a problem of training general management executives is understandable. As industry has grown and prospered there has come about an increasing specialization on the part of human executives. For example, every business of middle to large size tends to have people charged specifically with some one function, as accounting, or purchasing, or production, or sales. By such specialization the company functions more efficiently, every executive being free to devote his whole time to an area in which he is especially qualified.

But as business executives have tended to specialize, the problem of developing top management executives has become more difficult. Some companies have established their own programs for training such general executives while others have felt that although this might be desirable, it would perhaps be better to have their up-coming executive talent train with executives from other companies and industries, away from the



University of Georgia's Dean James E. Gates

company itself. Whatever the policy adopted, all progressive companies are aware of the necessity of constantly replenishing their supply of general executive talent and of the necessity of seeing that such talent is continually upgraded to its maximum potential.

The time was when executives were trained almost exclusively on-the-job by trial and error method so to speak. Most industries today feel that this method not only proves too costly in both time and money but is often less effective than special training courses can be.

In answer to industry's need colleges and universities throughout the country have opened their doors to industrial personnel offering special training sessions for junior and middle-level executives. These courses are a tangible expression of the fact that both industry and education realize that a man's need for training doesn't end with his college degree. Most often the special executive training programs offered by universities has taken the form of courses of study to broaden the general background of industrial leaders tied by routine to a repetition of daily functions, but sometimes they have involved special lectures by university faculty of general or specific interest to business leaders.

To answer the urgent need of Southern industries for trained executives, the University of Georgia's College of Business Administration is making its facilities available to industry this summer, offering a special four-weeks Executive Development Program from August 24 to September 19. At the end of this time college officials hope to have gone a long way toward helping industry solve its executive training problems.

The course is the first of its kind offered in the South, but it will be similar in many ways to executive training courses that have been taught with such success at Harvard, Columbia, and Northwestern Universities. Enrollment will be limited to 30 men with not more than two from any one company. All

men enrolled in the course will be executives who are making a contribution to current policy formation in their companies and are in line for promotion to top-level administrative positions.

According to Dean James E. Gates of the University's College of Business Administration, students registered in the course will have a common meeting ground in their concern with general business principles. At the same time their widely varied professional backgrounds will give breadth to a program whose success will depend to a large degree on the individual contributions of the students enrolled.

The specific objective of the program, Dean Gates points out, is to provide a means whereby executives from several companies and industries may study together their common problems under the guidance of skilled leaders so that when they return to their jobs they will be better executives than they were before they came. The broad view of business will be taken, as opposed to the narrow specialized view commonly found in many companies. The course will thus serve both as a broadening process for functional executives or division managers, and as a training ground for general management.

The policy of accepting no more than two men from any one industry was set up to insure that every participant would be exposed to a broad view of industry generally and would have an opportunity to associate with executives from widely varied types of industry. Registered for the course at the University this summer are executives from five states representing concerns as varied in function as mills, railroads, banks, and public utility companies. The average age is about 40, the maximum 49, the minimum 33. The jobs held by these men runs to vice president, assistants to the president, and plant and division managers.

In keeping with the generally accepted belief that the success of an executive development program depends somewhat on the opportunities of the participants to exchange ideas and experiences, arrangements have been made for the men attending the Georgia program not only to attend special classes, but to live under one roof and have meals together. Because the whole program falls between the University's summer graduation exercises and the opening of the fall term, the Kappa Delta sorority house will be available for their use. The entire program will be conducted here, one of the most beautiful homes in a town noted for gracious living.

The program schedule is arranged so that ample time is allowed for the participants to become well acquainted with one another, to have lengthy and frequent "bull sessions," and to enjoy the University's recreational facilities. In addition to the facilities found on the campus, the executives will have use of the private swimming pool located in the KD House back yard.

For the four weeks of the course the men will be competely removed from

their normal responsibilities. For many of them perhaps it will be their first chance to get far enough away from the trees to see the forest. They will look at business as a whole, see how its parts integrate, and learn how to meet and combat the social, political, and economic forces that affect it.

To guide their thinking and direct their study will be several members of the University faculty, a professor of industrial administration at Carnegie Tech, and half a dozen or more experts in various fields of business relations. The latter will give special lectures. All the instructors will be available for discussion of individual problems.

There will be no one dominant method of instruction, Dean Gates points out. Class discussions, case materials, lectures, and group discussion outside class are all part of the total learning process. Each participant is expected to contribute, from his experience and knowledge, to the process. The ultimate aim is to aid the participant in developing himself as an executive and as a person. In doing that, he must contribute to the team processes of the group, as he would in his own organization, and his development will be in proportion to his contribution.

Basically the program of study will be divided into two parts: (1) "The Executive as an Executive," and (2) "The Executive as a Person." The first part will deal with the executive's relations within his company and within his industry; the second will point up the fact that an executive must be effective outside his working hours, especially in his personal life, if he is to be mentally and physically sound on the job.

Under the first classification, "The Executive as an Executive," there will be formal class meetings for three hours a day with two basic courses being taught. The first of these, "Business Policy Formulation and Administration," will be taught by Dr. Melvin L. Anshen, professor of industrial administration at Carnegie Tech and consultant to several government agencies and private concerns. This course will deal with the use of accounting, statistical, and other control devices as a guide to making business policy for a firm confronted with actual merchandising, financial, and other problems.

The second course on "Human Relations," will be led by Robert L. Froemke, assistant professor of economics at the University of Georgia. Prof. Froemke will take up the methods of getting things done through people and the maintenance of an effective organization. Both courses will deal with actual cases, collected by Harvard University with the participants working on these cases in exactly the same manner they would work on them in their own businesses.

Each of these two basic courses will meet for approximately one and a half hours daily. A fourth hour will be spent in class on training the executive as a person. Senior members of the University faculty will work with the men during this hour on the problems of personal

finance, the tax laws and their effects on individuals, health and conditioning, retirement and its problems, community and group leadership, and effective communication, both oral and written. Although these classes will be carefully organized, they will not have the same continuity as the two basic courses.

All classes will meet for five days a week. It is estimated that an additional 40 hours a week will be required for individual study and consultation with professors who will be living with the group.

To strengthen the program and broaden its scope, eight special lectures by experts on a particular problem of business or industry have been scheduled. These will be held an average of two evenings a week during the entire course.

Special lecturers are Dr. J. Whitney Bunting, president of Oglethorpe University, who will discuss business ethics; Prof. James Sweeney, director of the public utility development program at Georgia Tech, labor problems; Dr. Walter G. Bentrup, School of Social Work at the University of South Carolina, family and group tensions; Dr. Wesley Wiksell, Louisiana State University, communication techniques; Earl G. Planty, director of Executive Development for Johnson and Johnson, executive development generally; and Jackson Martindell. President of the American Institute of Management, management. Two other lecturers are to be announced.

As a part of the program a reading clinic will be established so that every participant may improve his reading speed if he likes.

The four-weeks Executive Development Program grew out of a series of Executive Management Seminars conducted on the campus last spring. These seminars were one-day meetings in which business and industrial personnel met with University faculty to discuss problems of importance to the individual business executive. They were led by established business and association executives. The best features of these seminars have been incorporated with the best features of executive development programs conducted in other American universities in plans for Georgia's program this summer.

Faculty for the course, in addition to Dr. Anshen and Prof. Froemke, include Dean Gates, Dr. Glenn W. Sutton, professor of economics and chairman of the finance division at the University, and Dr. A. Aldo Charles, professor of economics and chairman of the University's real estate and insurance division.

Dean Gates is a fellow of the American Institute of Management and is the author of several textbooks in the business administration and economic fields. Dr. Sutton is an authority on finance and at present is engaged in an extensive study of the methods of attaining financial independence through judicious investments. Dr. Charles, holder of a law degree and a member of the Bar of Virginia, is an expert on real estate and insurance. His current project is a study of the magnitude and implications of private pension plans of firms and institutions.

SOUTHERNERS AT WORK

American Cast Iron Pipe Advances Herrmann, MacKay

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Mr. Herrmann has served as assistant general sales manager of the American Cast Iron Pipe Company since May, 1952; prior to which time he served as manager of the Acipco Sales Office in Kansas City, Missouri, for twenty-three years. He started with the Company in Birmingham in 1914, and has worked in various departments including the Carpenter Shop, Machine Shop, Traffic Department, Shipping Department, Loading Yard, Laboratories and Experimental Department. In 1927, he was made assistant manager of the Kansas City Office, being promoted to manager in 1929.

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Other officers elected by the Board were Richard G. Jones, first vice-president; Charles I. Denechaud, Sr., Friend W. Gleason, and Streuby L. Drumm, vicepresidents.

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At the meeting, Hecht, who presided, told the Board members of his recent trip to Vienna, Austria, where he attended a meeting of the International Chamber of Commerce.

Hecht said that with the support of the entire U. S. delegation to the convention, an invitation was extended the congress to meet in New Orleans its next international meeting in 132. He explained that other countries, addition to the United States, have be for the meeting and that a final decision is up to the Board of Trustees of the organization.

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Walther is a native of Gibson, La., was graduated from Louisiana Tec-Ruston, La., at the age of 17.

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Mr. Halvorson succeeds the late Mr. Fred Brenckman on the Council's Board, while Mr. Van Every succeeds E. M. Fetherston, Jr., Colonial Stores, Inc., Atlanta, Georgia.

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Mr. McGehee said appointment of Mr. Quarnstrom is a move toward expanding work of the bureau.

Mr. Quarnstrom will work with others in the wood preserving industry who are active in promotion of the use of pressure treated lumber, timbers, poles and piling, Mr. McGehee said. His office will be at 111 West Washington Street, Chicago 2, Ill. Mr. Quarnstrom has had extensive newspaper and public relations experience. More recently his work has been in an administrative capacity on Capitol Hill.

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Texas Eastern Names Moseley to Houston Post

Harry R. Moseley has been appointed Gulf Coast division superintendent for Texas Eastern Production Corporation of Houston, Texas, according to an announcement made by H. A. Hemphill, president. Mr. Moseley, who joined Texas Eastern Production Corporation in December, 1951, as district petroleum engineer in the district office in Shreveport, Louisiana, was transferred to the Houston office in December, 1952.

Before coming with Texas Eastern Production Corporation, Moseley was associated with The California Company as a petroleum engineer in Brookhaven, Mississippi. He graduated with a bachelor of science degree in petroleum engineering from the Louisiana State University, and served in the Army Ordnance Department during World War II as a first lieutenant.

GM&O Promotes Three in Traffic Department

Assistant Freight Traffic Manager I. H. Wente has announced the promotion, effective July 1, of W. B. Hahn, formerly of Jackson, Tennessee, to the position of assistant general freight agent at Chicago. Succeeding him in Jackson, Tennessee, as division freight traffic manager, according to announcement made by Traffic Manager E. B. Farrell, is C. L. Garrard, formerly commercial agent at Jackson. The position of commercial agent is filled by W. R. Kelley, who was promoted from freight traffic agent at Meridian, Mississippi, to the position of commercial agent at Jackson.

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N&W Appoints Carr General Tax Attorney

James E. Carr, of Washington, D. C., has been appointed general tax attorney of the Norfolk and Western Railway, a new position. He joined the railway's legal staff in Roanoke, Va., on August 1.

A native of Farmington, Iowa, Mr. Carr is a graduate of Coe College and received his law degree with honors from the University of Pennsylvania. He comes to the railway from the Washington law firm of Covington & Burling where he has specialized in tax work for several years. He served in the Navy during World War II as a lieutenant-commander, spending 27 months, including the Normandy Invasion, attached to the USS Nevada.

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NEW PRODUCTS

Sign Maker

Mak-A-Sign Company, P. O. Box 2290, Birmingham, Ala.—Many factories, mills and mines, are easily, quickly and economically making their own signs with Mak-A-Sign adjustable sign kits. They are available with layout frame and



Mak-A-Sign Kit.

plate, assembly frame, in 3 ft., 4 ft., 5 ft. and 6 ft. lengths which accommodate horizontal and vertical letter and numeral plates with characters ranging in size from 2 to 6 inches.

The lettering job may be done with the brush or spray gun method. According to the manufacturer, this equipment has been in use by towns, cities and counties throughout the country for over 5 years. Industrial concerns are now beginning to show interest in this new product.

Protection Tube

Conax Corporation, 4515 Main Street, Buffalo 21, New York—A new Conax Thermocouple Speedwell Protection Tube.

This fast response Thermocouple Speedweil Protection Tube eliminates junction boxes, prevents "breathing" of corrosive gases or liquids into well, holds thermocouple in place, and provides fast interchangeability for checking and replacing thermocouples.

The small diameter thermocouple tube with subsequent low mass provides greater accuracy and faster response. The entire Conax Thermocouple Speedwell Protection Tube is made of stainless steel to resist corrosion both inside and outside. Neoprene is the standard sealant. Teflon or Asbestos Graphite are also available as sealants. End fitting

locks and seals 20 gauge or 24 gauge insulated Duplex Thermocouple in well. The seal is effected by compressing the neoprene washer around the wires.

The Conax Thermocouple Speedwell Protection Tube is supplied with a Conax Stainless Steel Adjustable Midlock Tube Fitting for sealing and adjusting immersion of Speedwell Protection Tube into vessel. Type 304 stainless steel well is rolled, welded and polished at tip to maintain uniform wall thickness throughout.

Electronic Counter

Potter Instrument Co., Inc., 115 Cutter Mill Road, Great Neck, N. Y.—A versatile new electronic Predetermined Counter has been designed for use wherever precise, multiple sequence control of manufacturing processes is desired.

Increased production and reduced spoilage are achieved with the use of the new counter because it is possible to govern the operation of production machinery in terms of lineal measurement, shaft revolutions, quantity, volume, or weight at operation speeds as high as 60,000 per minute.

Manufacturers of the Predetermined Counter, point out that most machine cycles referenced against time are compromises where the controlling data, feet per second or RPM, for example, is subject to variations. Since the new true-count method is not affected by speed changes, shut-downs, etc., the Potter Predetermined Counter offers precise control not otherwise possible.

Lift Trucks

Truck-Man Division, The Knicker-bocker Co., Jackson, Mich. — Two completely new high lift trucks. The new models are designed to solve the problem of low load limits on elevator floors in the light-weight, low-cost and high-lift field.

Both models are designed around the 360-degree rotating Truck-Man power turret which has performed so successfully for years on the firm's models used in horizontal movement.

The model D-15 is a counterweighted high-lift having a capacity of 1,500 lbs., with the truck itself weighing only 1,700 lbs. Truck, load and operator weigh less than 3,500 lbs., the manufacturer states. The standard model has an 84" lift with the above capacity based on 15" load centers according to the announcement.

Model DS-20 is similar to the D-15 but balance is maintained by stabilizing outriggers which project forward on each

side of the load. Because of the difference in achieving balance, the weight of this model is only 1,300 lbs. versus a load capacity of 2,000. Even with the additional capacity it is claimed, the total weight of truck, load and operator is still less than 3,500 lbs.

Hydraulic Work Level Stands

The Scaffold Equipment Company, Pittsburgh, Pa.—A new economical hydraulic platform stand for industry. The unit has been constructed to combine both dependability and safety into its engineering design. It provides for easy access to elevated levels with portable, lightweight, knockdown equipment. Regardless of the maintenance operation, whether it be hoisting a section or assembly into place, or from the start of production to final adjustment the hydraulic platform stand is ever-ready at any stage within a fraction of an inch to do the job.

Its rugged construction will hold two thousand pounds over an eighteensquare-foot deck area adequate for any ordinary size load—sufficient for the men



New Scaffold Lift

who use it. It is an all-welded steel constructed unit made from special carbon steel tubing.

Each stand consists of approximately eight sub-assemblies that can be erected in fifteen minutes. Knocked down, the unit is easily stored or transported. The "Lift" on this unit consists of either a three-foot or five-foot hydraulic ram, and a "Power-Pak" hand pump of standard make. Elevation occurs at the rate of two feet per minute and recedes within seconds. The mobility of this unit is provided by either 5" or 8" rubber tire brakelock casters. Its safety features consist

of handguard rails (removable) to prevent falling, safety tread decking and stairing to prevent slipping. Thumbscrew safety locks are provided on all four legs to lock the level at any position as an added safety feature.

Double Pass Boilers

Lucey Boiler & Manufacturing Corp., Chattanooga, Tenn.—Development of a line of "Double Pass" boilers is announced by Lucey Boiler & Manufacturing Corporation. This line combines with their present single pass locomotive firebox type boiler.

The double pass boiler is a compact unit available in sizes ranging from 36 H.P. to 153 H.P., S.B.I. rating, with pressure to 150 lbs. It is adaptable to every type of industry requiring steam up to 150 lbs. for power and (or) heating. It is designed for either coal, gas or oil firing and can be furnished complete as a package unit.

The new Double Pass Lucey Boilers are specially adapted for use in the laundry and dry cleaning, food processing, dairy, textile and wood-working industries, as well as schools, hospitals and public institutions. Bulletin No. 153 gives complete information, and L. C. Train, president of the company, stated that dealerships are available.

Cable Conveyor Line

Cable-Link Corporation, 20175 John R Street, Detroit 3, Mich.—Cable conveyor systems based on the use of improved, plow steel cable, cut to 16", 24" and 32" lengths, with steel buttons swedged on both ends. These lengths of cable, thusly fabricated, are called "cable-links" by the manufacturer.

The swedged-button ends of the "cablelinks" recess in the cavities of malleable steel brackets specially designed by C-L engineers. The brackets thus envelop



C-L Conveyor Line

the ends of "cable-links." Steel nuts, threaded on the tapered "sleeves" of the brackets, exert a 360° pressure on the cable, retaining the Cable-Link patented trolley assembly at an immovable station. Trolleys can be placed on 8", 16", 24" and 32" centers.

NEW PRODUCTS

Hinge Covered Terminal Blocks

Buchanan Electrical Products Corporation, 225 Route 29, Hillside, N. J.—The Buchanan heavy-duty molded terminal blocks are now available with non-separable hinged covers which provide effective added protection to control and circuit wiring, and at the same time enable ready access to connections when required.

These blocks can be furnished with either screw or solderless type contacts as illustrated, and in 4, 6, 8, or 12 circuit sizes with either plain or numbered marking strips. They are conservatively rated at 750 volts, 35-amperes for the screw type and at 750 volts, 50-amperes for the solderless type.

Blocks are molded of CFG compound per Military Specification MIL-P-14, but can be furnished in special materials and finishes or with special circuiting arrangements, marking details, etc., on request. Blocks are also available without covers or with screw-on separable covers.

Specimen Spinner

North American Philips Co., Inc., 750 S. Fulton Ave., Mount Vernon, N. Y.—A new cylindrical specimen spinner which is used in place of the standard specimen holder of the Norelco wide-range goniometer for special X-ray analysis work.

The new unit has been designed to facilitate the handling of specimens of limited size and quantity where the problem involves individual analysis of small fibers or filaments, the use of sealed capillary tubes, or the coated fiber method.

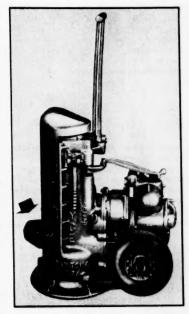
The specimen holder is rotated at approximately 130 rpm by means of a precision gear assembly driven by a synchronous motor that plugs into one of the 120-volt, 60-cycle, single-phase receptacles provided on the Norelco X-ray diffraction unit.

Air Jack

Joyce-Cridland Company, Dayton, Ohio—This powerful jack will pick up a 75-ton load as low as 9" from the floor and lift it as much as 13%". The Toe-Lift can be quickly removed and the jack will lift 100 tons on top of its ram.

The jack is the ball bearing geared screw-type, powered by a five horse-power, multi-vane Ingersoll-Rand, heavy duty rotar air motor. It features an automatic shut-off at both upper and lower limits of the ram . . . easy portability with long trundling handle and large roller-bearing, semi-pneumaticitied wheels . . . and a massive base for great stability.

The company states that the 100-ton air motor jacks now being manufactured can have the toe-lift feature added at any time without altering the jack. Also,

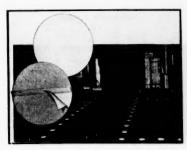


Joyce Jack

existing 100-ton Joyce Air Jacks can be converted for use with the new toe-lift feature.

Aisle Markers

W. H. Brady Company, 727 West Glendale Ave., Milwaukee 12, Wis. — Stock Brady Aisle Markers are made of durable, colorful plastic, backed with a heavy-



Brady Markers

duty, pressure-sensitive adhesive. They offer the maximum visibility that only a dotted line can provide. They are stocked in four bright colors—Caution Yellow, Fire Red, Safety Green and Neutral White—sharp, vivid colors that (Continued on page 50)

NEW PRODUCTS

(Continued from page 49)

command attention even in poorly lighted areas.

Besides costing far less to buy than paint, molded markers or tape, Brady Aisle Markers are economical to apply. They stick fast to any clean, dry floor without moistening. Any unskilled worker can make curved or straight lines quickly and without costly machinery. Production isn't disrupted while paint dries . . . no clean-up work is necessary.

Locker Rack

Lyon Metal Products, Incorporated, Aurora, III.—This is the most practical clothes storage unit where space is limited and low cost is a requisite. Accommodates 10 persons—completely portable.

Coat is secured by dropping chain through sleeve, and then locking chain



Portable Locker

in position in slot in door. With door locked, coat is secured.

Doors drop shut from top. Each door equipped with built-in lock, 2 keys.

Raised base keeps clothing and overshoes off floor.

Doors finished in light tan-balance of unit in Lyon Green baked-on enamel.

Size: 50" wide, 18" deep, 76" high.

Industrial Balancer

Merrill Engineering Laboratories, 1240 Lincoln, Denver, Colorado—Quick set-up without a foreman (less than two minutes) plus extreme range in capacity make the new Stewart-Warner Electronic Industrial Balancer excellent for

maintenance as well as production balancing.

High-speed milling heads, cutters, and grinding wheels may be precision balanced to eliminate marks due to vibration. By eliminating vibration, speeds may be increased for faster cutting as well as safety for the operator. Precision sensitivity is possible at all weights of items checked or balanced from the range of ½-lb. to 1,000 lbs. By turning a knob, five dash-pot positions allow balancing at different sensitivities to a maximum of 0.04 oz. inches. Because of balancing at mechanical resonance, sensitivity remains the same at all weights of object being balanced.

The part being balanced is brought above the resonant speed and allowed to coast freely through the balancing zone, so that the readings are not affected by the drive belt or other contacts that may introduce possible error.

TV Camera for Business

Dage Electronics Corporation, 69 N. Second St., Beech Grove, Ind.—A new highly portable, completely self-contained television camera having all adjustments on the unit. The Dage Television Camera is "briefcase" size, 14" long by 9%" high by 4%" wide, which allows versatility in placing the unit for viewing almost any operation in any location.

Dage's highly functional television camera is designed for use in business—industry, manufacturing, mining, warehousing, refining, milling, transportation, lumber, retailing, and in many other applications. Also, hospitals, laboratories of all types, and educational institutions should find this portable television unit an excellent aid in their operation.

Several years of research and planning have been put into the Dage Television Camera unit, and the result is a simplified circuit that requires a minimum of attention and maintenance. It is no harder to focus a Dage Television Camera than any home receiver. Precisely designed and ruggedly built, this easy-to-operate camera will give long years of efficient, trouble-free service.

Recording-Playback Unit

Mohawk Business Machines Corp., 47
West Streek, New York, N. Y.—Compactness and versatility are features of a new Message Repeater. Weighing less 'than six pounds and only six inches long, the recording-playback unit has been found useful in scores of industries, according to the manufacturer.

Completely self-contained in a metal case, the unit has been used by supermarkets and retail stores as a point-of-purchase sales builder. Gasoline service

stations attach a Message Repeater to the gas pump and while the tank is being filled, a sales talk is delivered on products or services. Theatres, carnivals and side shows use the unit as an electronic "barker." Banks have installed units to call attention to special services and Christmas Club promotions.

Other users include radio stations, appliance dealers and automobile show-rooms. The device has made its bow at a number of trade shows and has been used by advertising agencies for talking displays.

Operation is simple. The user speaks into a microphone which is part of the device and a talk, up to two minutes in length, is recorded. To change the recording it is only necessary to throw a switch to "record" and a new recording is made on an endless tape, while the old message is automatically erased. The machine may be activated manually or can be set off by a photo electric cell, pneumatic foot switch, time clock control, or other device.

Fold-A-Way Cart

Parker Sweeper Co., 55 Bechtle Ave., Springfield 99, Ohio—Originally designed for use as a lawn-care aid in conjunction with the lawn sweepers, a number of manufacturing concerns have been purchasing the cart to use in materials handling. Principal reason given for use by industrial purchasers has been the lightweight, yet sturdy, construction of the cart and its maneuverability and ease in handling. Extra-strong canvas duck baskets, easy to remove from the frame, fold up like a traveling case for easy carrying and are durable as well.



Parker Fold-A-Way

In the fifteen-bushel size, the cart has proven more satisfactory, many purchasers report, than less functionally-designed drums and metal baskets. Space-conscious manufacturers have in many cases adopted use of the carts because of their fold-away storage feature.



THIS ILLUSTRATION IS A REPRODUCTION OF AN ORIGINAL NEEDLE-POINT TAPESTRY.

WOVEN INTO THE FABRIC OF THE NATION

Daily, as on a magic loom, the countless activities of millions of people are woven together by telephone.

Home is linked with home. Business to business. Community to community. City to city. Friends and places nearby or far away are within the reach of a hand.

Without the telephone, time and space would rush between us and each would be so much alone.

And so many things would not get done.

nation.

Missing Keys

(Continued from page 36)

life is that a number of great American companies are engaged in opening up the new resources of the world, are, at the same time, working hard and conscientiously to raise the standard of living in the areas where they operate.

As new skills are created among the native workers, new wealth is pouring in. Hospitals are being built, and schools, and recreation centers. The standard of living in these scattered areas is coming up. Given time, this effort alone will act to insure against Communist infiltration.

I suppose the matter can be summed up by saying that we must take care to see that the Iron Curtain does not clang down on the areas around the world which are important to us from the point of view of supplies.

When given a freedom of choice, people normally do the right thing. We must do whatever we can to help these people to enjoy the freedom and liberty we enjoy under our Constitution. If we pursue this policy conscientiously and relentlessly, our way of life, even in the darkest Africa, will most surely win.

We are a most fortunate country. We are fortunate because we have a tradition of facing up to our problems and solving them. Because of our natural geography which gives us so vast a land space unfettered by narrow trade barriers. Because we are an ingenious people.

We are doubly fortunate at the moment. We eat, sleep, live on a base of steel—and at this time, there is no shortage of steel.

Our national defenses are building strongly. Our steel industry is continu-

ing to plan far ahead and to be wisely watchful of all developments.

But let us never over-estimate our good fortune. We are part of a very great nation in a very great world. There is no place for provinciality, nor insularity. Not for the South, a growing new South. Not for America, a growing America.

It has fallen to the lot of Americans to be the leaders. And we shall be the leaders. For if we can lead in the world as we have led in our nation, the world will have been better for our being here.

409 Ships Clear New Orleans Grain Elevator in Record Year

A total of 409 ships, sailing to ports on every major continent, cleared the Public Grain Elevator during the fiscal year ending June 30, 1953, it was announced by E. H. Lockenberg, general manager, for the Board of Port Commissioners. This is an average of 34 ships per month, for the entire period, or more than a ship a day, leaving the Public Elevator with grain for foreign countries, he added.

During the fiscal year more than 82,-393,613 bushels of grain cleared the elevator for export shipment, a record breaking year in the true sense of the word, Lockenberg said. The 1952 figure of 72,936,556 bushels for the fiscal year was a record which broke that of fiscal 1951 by over 2 million bushels, this year however was a resounding 10 million bushel increase over that record breaking figure.

"It is a real tribute to the foresight of our commissioners, that the new Public Grain Elevator expansion, which will double our present facilities, is well underway, and expected to be finished

late in December," Lockenberg said. "With each year successively breaking the previous year's record, as has been the case since 1946, there is a real need for the new elevator, which will increase our storage capacity to around 5 million bushels. Though it is the largest single investment ever made by the Board of Port Commissioners, over 7 million dollars, there can be no doubt as to its necessity, and as part of the Port's 30 million dollar expansion program, it is a credit to the Board of Commissioners, whose overall plans for the future have made it possible to cope with problems at the Port before they arise."

Calco Chemical To Build \$14 Million Plant at Savannah

American Cyanamid Company's Calco Chemical Division will build a \$14 million titanium dioxide plant on the outskirts of Savannah, Georgia. This was announced on July 22nd, by the firm's president, Mr. Kenneth C. Towe.

Titanium dioxide, marketed by Cyanamid under the trade name Unitane, is the whitest of all pigments.

Construction of the new plant, Mr. Towe said, will begin the last quarter of this year and is expected to be completed early in 1955. It will occupy a 1,600-acre tract of land along two miles of the south shore of the Savannah River.

The plant has been designed by Robert and Company Associates of Atlanta, under the supervision of Cyanamid engineers and will be built to permit doubling of output at some future date.

This will be Calco's third facility for production of titanium dioxide. The other two are in Piney River, Virginia, and Gloucester City, New Jersey. It will be Cyanamid's 43rd plant and the Company's 20th plant in the South.

New Industry

(Continued from page 34)

000 per year works miracles in any man's community, just let such person visit any one of some 200 Southern urban centers that have made one or more such acquisition since the last war.

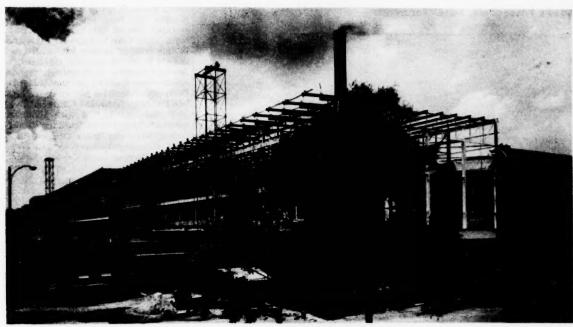
There it will be learned that by this method, and by no other, can Southern income be materially raised above its current subnormal level.

So, as stated above, charts such as the one being discussed are excellent means of carrying the message which the South wishes to broadcast, and their statistical deficiencies pale in the light of the inspirational value they possess.

It is also pertinent in this connection to state that the averages presented above, while being true for the Nation as a whole, will be found to vary widely among geographical sections, and even more widely between different types of manufacturing enterprise.



"I can take sixty words a minute, if you can spell that fast"



Part of a major addition to the Gulf States Paper Co. plant, Tuscaloosa, Ala. Rust Engineering Co., general contractors. Structural steel fabricated by O'NEAL, 650 tons.

EXTR

EXTRA PAPER!

Extra Space for Storing Extra Paper

A

give them the extra warehouse space they needed.

Because, when extra speed of construction is vital

—when extra strength and endurance are essential—when extra flexibility of design is necessary

—nothing equals **STEEL**.

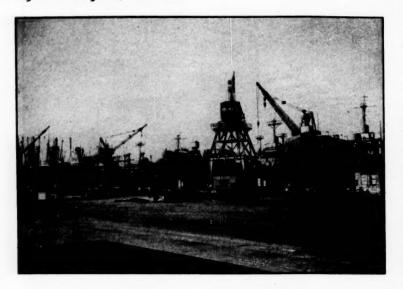
Gulf States Paper Co. relied on structural steel to



O'NEAL STEEL WORKS

Birmingham 2, Ala.





Bureau of Ships Official Cites Ingalls Record

Captain Ralph K. James, of the Bureau of Ships, U. S. Navy, praised The Ingalls Shipbuliding Corporation for "a remarkable achievement" in constructing five LST's (Landing Ships, Tanks) for the Navy in record time.

In releasing excerpts from Captain James' speech at the recent launching of the fifth LST being completed by Ingalis at its Pascagoula, Miss., shipyards, R. I. Ingalis, Jr., chairman of the board, said "our company is extremely proud of this record and Captain James' comments, and we are determined to continue to set the pace in this program as we have in others."

"You are now launching the eleventh ship in the program of lifteen," Captain James, founder of the Shipbuilding Scheduling Activity, and now Comptroller, Bureau of Ships, pointed out.

"You have beat and lapped all other builders. If you continue as rapidly as you have to the point of launching in completing your ships, you will even beat the builder who was six months out in front of the entire program, and I think that is a remarkable achievement.

"In the course of construction many material problems were haunting the builder in each step of the way, also changes in design but, in spite of those handicaps, this yard has come out in front and I congratulate each and every man who has had a hand in that job. It's a remarkable record. It is part of the reason why the Navy Department has entrusted to Ingalls the construction of four more LSD's and the Ice Breaker. That's not the end of the line, either. The 1954 shipbuilding program which we have recently been presenting to the Congress will soon be approved. In it are more ships. I hope there are more ships for Ingalls.

"Ingalls is in the Big League of shipbuilders and we need the support of those builders to keep our shipbuilding industry healthy and alive and it is only with the kind of effort that you people are putting forth here that it will be possible to keep our shipbuilding industry in its position as a vital second line of defense of our nation.

"In closing, I extend to you men of Ingalls who made this event possible, my heartiest congratulations and Admiral Wallin, the Chief of the Bureau of Ships, asked me expressly to extend his best wishes to you on this occasion also. Thank you."

Commercial Credit Names Skyscraper Architects

Announcement was made in Baltimore, Md. on August 3rd, by Alexander E. Duncan, Chairman of the Board of Commercial Credit Company that its operating subsidiary Commercial Credit Corporation, a Maryland corporation, has retained Harrison and Abramovitz, Architects of New York City and Edwards and Hjorth, Consulting Engineers of New York City to design the multi-story office building which that corporation plans to erect on property located at St. Paul and Saratoga Streets and numbers 309, 311, 313 N. Charles Street in Baltimore.

Mr. Duncan said, "careful studies have been made of the most recent and modern office building designs erected or planned in the major cities throughout the country. We have looked for an architectural firm and a firm of consulting engineers which have had recent experience in designing and erecting the type of large modern office building that we want to build in Baltimore. We are particularly impressed with the develop-

ments made in aluminum. For all these reasons we have selected the architectural firm of Harrison and Abramovitz. They have had special experience in this type of project having designed the 31 story Aluminum Company of America building in Pittsburgh, the Administration Building for the Aluminum Company of America in Davenport, Iowa and the 36 story Republic National Bank of Dallas building, all with aluminum exteriors. They also designed the 40 story Mellon Bank and Trust Company-U. S. Steel Company building in Pittsburgh and the Corning Glass Center, Corning, New York.

"Harrison and Abramovitz had a large part in designing the United Nations Headquarters in New York City. The firm was also one of the three firms employed in the designing of Rockefeller Center. Life Magazine recently featured their design for the new American Embassy building in Rio de Janeiro, Brazil. Most recently it was announced that they have been engaged to design the new forty-two story Socony Vacuum building in New York City.

"Because of their experience we have selected as consulting engineers the firm of Edwards and Hjorth. They have supervised the structural design for the 25 story Mutual Life building, New York, the 39 story U. N. Secretariat Building, New York, the 36 story Chrysler building East, New York and many other multistory office structures in New York, Pittsburgh, Dallas, Tulsa, etc."

New Industry Planned For Monticello, Miss.

Final plans for the location of a unique new industry on the GM&O at Monticello, Mississippi have been announced by officials of the Monticello Industrial Corporation, Inc., which was organized a little more than a year ago for the purpose of securing industries for Lawrence County. By a vote of 16 to 1 a bond issue election was carried on July 7, assuring the establishment in Monticello of a branch plant of the Phalo Plastic Corporation of Worcester, Mass. The plant will be known as the Phalo Corporation.

The Massachusetts Company manufactures thermoplastic insulated wire and cable, primarily for the radio, television, communication and electronic industries.

A 30,000 square foot building will be erected under the Mississippi Balance Agriculture with Industry Laws. Arvid S. Johnson, president of Phalo Plastics Corporation, has indicated that manufacturing operations will begin in December, with initial employment of one hundred persons and eventual employment in excess of three hundred persons.

Cooperating in the location of the plant have been GM&O Industrial Agent J. R. Glynn and Engineer Robert Hire, both of Mobile, and local Attorney J. P. Patterson of Monticello. A spur track from the GM&O line for servicing the plant has already been staked out.

U. S. Manganese Imports Reached New Peak in '52

The United States imported a record high amount of maganese ore from 19 countries during 1952, Department of Commerce reports show, according to American Iron and Steel Institute. The tonnage of contained maganese, essential to steel-making, was 969,000 net tons, also a record. High grade metallurgical manganese ore is lacking in commercial quantities in this country.

Of the five top-ranking manganese sources which together supplied three-quarters of the tonnage imported in 1952, only Cuba and Brazil are in the Western Hemisphere. The other three leading sources—India, Union of South Africa, and the Gold Coast are at the end of much longer trade routes. Russia, a principal source of manganese for steel furnaces in the United States prior to World War II and again in 1948, supplied none during 1952.

The steel industry consumed more than 465,000 tons of new manganese in steel-making operations during 1952, the first year in which an official record was kept by the Institute. Additional manganese entered the steelmaking cycle in the scrap, pig iron and other materials charged into open hearth steelmaking furnaces. Most of the element used is absorbed by the slag and discarded after performing its necessary chemical functions in steelmaking.

Designs are now in preparation for a commercially feasible plant to recover the manganese currently wasted in slag piles. The technical problems involved in such a process have been overcome, and the success of an economically operable plant would materially reduce this country's present dependence on imports.

Office Building Planned For Fairmont, W. Va.

New York Life Insurance Company has purchased land from the Monongahela Power Company, Fairmont, West Virginia as part of a sale and lease-back arrangement involving the construction of a new office building in Fairmont for approximately \$1,500,000. In this type of arrangement, the property is sold to New York Life and the latter leases it back to the seller under a long-term agreement. The latter provides for a 30 year lease with options for renewal after that time.

Monongahela's new office building will house its executive and headquarters staff in Fairmont. The four-story, steel and brick building will be fully airconditioned and will provide office quarters for several hundred people.

New York Life, which has more than \$68,000,000 in similar investments in industrial and office buildings and in retail and specialty stores across the country, is one of the leaders in sale and lease-back financing, the company noted.



. . . where a Variety `acationland surrounds every industrial plant. Working hours are happy, contented hours with so many recreational facilities so close at hand.

Your industrial family will be happier in North Carolina

your profits higher with the many advantages of

"Accessible Isolation."

For a list of available sites and industrial buildings and other information, communicate with

DEPARTMENT OF CONSERVATION AND DEVELOPMENT, RALEIGH, N. C.

FINANCIAL NOTES

Sales and net profit of Mathieson Chemical Corporation reached a new high for the six months ended June 30, it was announced by Thomas S. Nichols, president. Net for the period, after taxes and preferred dividends, was \$8,828,633, compared with \$7,077,172 for Mathieson and Squibb on a pro-forma combined basis in 1952, and \$5,135,516 for Mathieson alone in 1952. The merger with E. R. Squibb & Sons took place on October 1, 1952.

This amounts to earnings of \$1.62 per share on the 5,463,773 shares outstanding June 30, 1953, as against \$1.63 per share on the 3,142,754 Mathieson shares outstanding June 30, 1952.

Second quarter income totaled \$4,351,-238 or 80 cents per share, compared with \$2,718,733 or 86 cents per share for Mathieson alone on the lesser capitalization in 1952, and with \$3,805,944 or 70 cents per share on the pro-forma combined basis of Mathieson and Squibb in 1952.

In his report to stockholders, Mr. Nichols said that the \$5,000,000 cost of rehabilitating the company's Morgantown, W. Va., plant, leased from the United States Government, to supply important civilian requirements, has been fully repaid, and earnings from the operation are now accruing to the corporation. The plant has been producing at a higher rate than at any time since its construction during World War II, he said.

Hercules Powder Company reported for the six months ended June 30, 1953, net income equal after payment of preferred dividends, to \$2.44 a share on 2,-677,937 shares of common stock outstanding.

Net income in the first six months of 1952 was equal to \$2.12 a share on 2,-672,038 shares of common stock then outstanding.

For the second quarter of 1953, net income was equal after payment of preferred dividends, to \$1.28 a share on common stock. This compares with net in-

come in the second quarter of 1952, equal to \$1.02 a share.

Net sales and operating revenues for the six months period were \$99,968,791, compared with \$91,724,153 for the corresponding 1952 period.

Net earnings of **Gulf Oil Corporation** and Consolidated Subsidiaries for the first six months of this year are estimated at \$3.21 per share.

This compares with \$2.84 per share for the similar period of 1952, based on the 23,598,120 shares outstanding following a 4% stock distribution made last December

Total net earnings of the company for the six month period are estimated at \$75,761,000. These compare with \$66,981,000 for the first half of 1952 when, because of industry-wide strikes, two of the company's major refineries were shut down with a resulting loss of product output.

Gulf's Directors, at a meeting on July 28, declared a dividend of 50¢ per share payable September 10, 1953 to share-holders of record at the close of business August 7.

The Pennsylvania Salt Manufacturing Co. has reported consolidated net earnings of \$1,888,374 for the first six months of 1953, as compared with net earnings of \$1.634,392 for the same period in 1952.

Net earnings for the second quarter, ended June 30, were \$955,824 as compared with earnings of \$710,356 for the same period in 1952. Earnings for the first half are equivalent to \$1.52 per share, and on the second quarter, 77 cents per share, on the 1,242,799 shares outstanding.

For comparable periods in 1952, earnings were equivalent to \$1.32 per share for the first six months and 57 cents per share for the second quarter.

Pennsalt's consolidated sales for the first six months of 1953 were \$29,839,405, the highest for any comparable period in the company's history. Sales for the same period in 1952 were \$29,280,512.

Sales for the second quarter of 1953

were \$15,665,676, as compared with sales of \$14,515,588 in the second quarter of 1952.

Allegheny Ludium Steel Corporation has reported record sales for the first six months of the year, totaling \$134.-319,368. This compares with a previous record high established in the first six months of 1951 of \$116,666,494. Sales for the first half of 1952 totaled \$89,261,834.

Sales for the second quarter of 1953, amounting to \$65,632,845, fell slightly below first quarter sales this year of \$68,686,523; earnings, however, were slightly higher. For the second quarter net earnings amounted to \$2,163,275, or \$1.25 per share of common stock after deductions of preferred dividends. This compares with earnings of \$2,098,370, equivalent to \$1.21 per share, for the first quarter. Earnings for the second quarter of last year amounted to \$889,425, equivalent to 49¢ per share.

For the first half of the current year, earnings per share amounted to \$2.46, compared with \$1.33 for the same period in 1952. Sales and earnings in the second quarter of 1952 were affected by the steel strike.

Consolidated net earnings of the American Car and Foundry Company and subsidiaries for the fiscal year ended April 30 amounted to \$8,684,976, equal after preferred dividend requirements to \$10.10 per share on the outstanding common stock, compared to \$8.64 per share last year on fewer shares. This compares with net earnings of \$7,202,165 last year, John E. Rovensky, chairman of the board, told stockholders in the company's 54th annual report.

Gross sales amounted to over 257 million dollars, an increase of approximately 47% over 1952—which in turn was an increase of more than 45% over 1951. "Defense work represented a greater percentage of the sales this year than last," stated Mr. Rovensky, "but the increase in the volume of diversified lines of regular work was also highly satisfactory."

George E. Dyke, president of Robert Gair Company, Inc., has announced that for the quarter ended June 30, 1953 the consolidated net income of the company and its subsidiaries was \$1,598,911, equal to 73¢ per share on 2,179,888 shares of common stock outstanding June 30, 1953.

The consolidated net income for the six months ended June 30, 1953 was \$3.-226,342 equal to \$1.48 per share on 2.-179,888 shares of common stock outstanding. For the same period in 1952, the consolidated net income was \$2,627,837 equal to \$1.21 per share on a like number of shares of common stock.

Net sales for the six months ended June 30, 1953 were \$59,482,778 as compared to \$51,295,580 for the same period of 1952, an increase of \$8,187,198.

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WHO'S WHERE

John B. Pruitt has been named the Baltimore representative for sales and service of C & D Batteries. Samuel W. Gibb, Vice-President in Charge of Sales of the Conshohocken, Pa., battery firm made the announcement.

Mr. Pruitt graduated from Healds College with a B.S. in Electrical Engineering. After graduation, he was associated with Thomas A. Edison. Inc. in San Francisco from 1948 to 1951 and in Baltimore 1951-52. During the war, Mr. Pruitt spent two years in the submarine service before being assigned to study at the Naval Research Laboratory.

Mr. Pruitt will maintain offices at 2406 N. Charles St., Baltimore, and brings a knowledge of industrial battery problems and requirements to his new position.

Howard Gill, a life long southerner, will cover the states of Mississippl, Alabama, Georgia, Florida and western Tennessee for the Flexible Steel Lacing Co., manufacturers of belt fasteners for joining conveyor and transmission belts.

This territory was formerly covered by Austin Webster who has retired after many years of service. Web's many friends in the field will be very capably served by Howard who is well acquainted with the problems of industrial distribution.

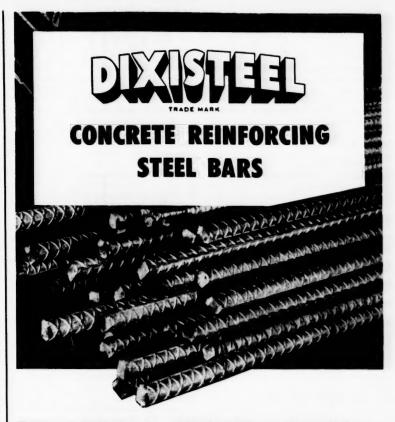
Appointment of A. James Hackl as manager of the Dallas sales office has been announced by Thomas Hancock, vice president in charge of sales for The Trane Company, I.a Crosse, Wisconsin, manufacturers of air conditioning, heating and ventilating equipment.

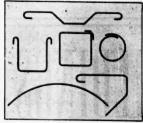
Hackl had been associated with the Jackson, Mississippi sales office for four years prior to his commissioned officer reassignment in the U. S. Navy in 1951.

He has a mechanical engineering degree from the Georgia Institute of Technology and is also a graduate of the Trane Engineering Class of 1946.

The Central of Georgia Railway Company has announced the following appointments: Mr. H. M. Croghan has been named assistant traffic manager with headquarters at Savannah. He is succeeded as general freight agent by Mr. E. E. Brown.

Effective July 16 Mr. R. E. Sease became superintendent of transportation with headquarters at Savannah. He succeeds Mr. V. M. Aspinwall, retired. Mr. Sease is succeeded as superintendent of the Columbus division by W. L. Ector, who, in turn, is succeeded as trainmaster in charge of the Chattanooga, Cedartown and Greenville districts by W. H. Brasselle. Mr. Brasselle's headquarters will be at Cedartown. Ga.





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BUSINESS NOTES

Goldberg Company, Inc., Richmond, Va., has been appointed a distributor for Whirlpool Corporation, world's largest manufacturer of home laundry appliances, it was announced recently by sales manager John M. Crouse.

Founded in 1908 in Richmond, the company also has branch offices in Roanoke and Norfolk, Va.

Officers of the company include Leroy B. Goldberg, president, son of the founder; George R. Goldberg, vice-president, and Hugo Windmuller, secretary-treasurer. Dealers will be serviced in 68 Virginia counties.

H. V. Stehl has been appointed vicepresident and general sales manager for Inland Steel Products Company, 4101 W. Burnham Street, Milwaukee, Wis. Formerly manager of the firm's Baltimore Branch, he assumed his new duties August 1.

Stehl replaces W. A. Jahn, vice-president in charge of sales, who became president of the Inland Steel Company subsidiary on that date. He also took over the responsibilities of general sales manager Robert S. Schmieder who retired August 1 after 36 years of service to the old Milcor Steel Company and its successor, Inland Steel Products.

In other Sales department appointments, Gordon Matthews, commercial re-

search manager, and Michael P. Komar, Chicago branch manager, were named assistant general sales managers. Matthews will be responsible for service functions, while Komar will direct the activities of the company's 10 branches located throughout the United States. Their appointments were also effective August 1.

The Binks Manufacturing Company, makers of spray painting equipment, announces the opening of a new branch sales office and warehouse at 3527 North 9th Street, Philadelphia, Pennsylvania. This new office will service the area formerly handled by the Hovey Spray Equipment Company.

The property consists of two buildings, providing 11,000 sq. ft. of floor space. Office and display area are located in the one-story portion of a two-level structure. The warehouse occupies the two-story portion and provides about 9,000 sq. ft. of storage space. There are thus about 2,000 square feet in the office area, which includes a conference room, display room and space for office personnel.

Republic Manufacturing Company of Cleveland, Ohio, maker of hydraulic valves, announces appointment as distributor of: Florida Metals, Inc., of 222 North 12th Street, Tamps, Florida, and also in Jacksonville and Miami, Florida; E. D. Sweetland Company, 405 Montgomery Street, San Francisco, California; Pace-Turpin & Company, 726 South Third Street, Salt Lake City, Utah; and Palmer Supply Company, 222 Westlake Ayenue, North, Seattle, Washington.

Republic manufactures small hydraulic and pneumatic valves for general, aircraft, chemical, and process industries, in all metals and types of connections, and sizes up to 1".

Hydraulic Fluid Tire Tubing—New 4-page bulletin just published by Joseph T. Ryerson & Son, Inc. includes Joint Industries Conference recommended practice for Standards For Industrial Equipment, analysis and description of cold drawn seamless steel hydraulic tubing that meets these standards, and table of sizes and calculated bursting pressures of steel hydraulic tubing available for shipment from stock. This bulletin may be obtained at any Ryerson steel service plant or by writing to the Tubular Products Division, Joseph T. Ryerson & Son, Inc., Box 8000-A, Chicago 80, Illinois

The American Ventilating Hose Company, a division of Callahan Zinc-Lead Company, Inc., is changing its name to The Flexaust Company. Because the uses of its products, Flexaust, a spiral-wire reinforced hose; Portovent, a hose with excellent lengthwise compressibility; and Bloflex, a collapsible hose, have spread to virtually every industry in America, the company is changing its name to better identify itself with its products. Flexaust's address is 100 Park Ave., New York 17.

Gas Heating Corporation of Norfolk, Virginia, has been awarded a franchise as distributor of Westinghouse unit heating equipment. The announcement was made by W. B. Cott, air conditioning sales manager of the Westinghouse Electric Corporation's Sturtevant Division.

Headed by Eugene Sargeant as president, the Gas Heating Corporation has been associated with the heating business in the Norfolk area since 1950.

The Sturtevant Division manufactures industrial air handling equipment, electrostatic air cleaning devices and industrial and home air conditioning apparatus.

The directors of The White Motor Co., Cleveland, Ohio, have approved an agreement to acquire the Autocar Co. of Ardmore, Pa., a producer of quality heavy duty trucks, in exchange for preferred stock of White Motor to be created for this purpose.

Robert F. Black, president of The White Motor Co., said, "The move is part of the company's long-term plan for diversification within the motor truck industry."

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Houston Oxygen Co. Producing Argon at New \$ Million Plant

Argon, a fabulous "lazy" gas that has gone to work for industry, is now being commercially extracted at the Houston Oxygen Company's new million dollar plant in Houston.

The colorless, odorless, and tasteless gas that is present in every breath of air we take, is now being bottled in a large scale production for specialized welding of stainless steel, aluminum, magnesium, titanium, eopper and carbon steel. The gas is also used for filling light bulbs, fluorescent and neon tubes.

The Houston Oxygen Company's argon plant, the only one in the South, works in connection with its liquid oxygen and nitrogen production.

Since the atmosphere contains .9 per cent argon, it is a matter of rectifying the air and breaking it up into its components which are principally nitrogen, oxygen and argon.

The air is filtered and compressed through five stages to 2350 pounds per square inch. As it passes through an expansion engine, the air is reduced in temperature to 170° C.

The air then goes into a huge, towering rectification column where it is liquified and broken down and the components are removed at various levels.

The crude argon gas goes through the tower a second time before it is poured into a giant balloon suspended from the

three-story ceiling. From there it is argon is required than any other inert funneled to the purifying plant.

The first two refining processes remove all but a trace of oxygen. The final step sends the impure argon into a furnace where hydrogen is introduced to combine with the oxygen to form moisture which is drained off. This leaves the argon 99.92 per cent pure, in its most refined state

Argon is the heaviest gas that is commercially bottled. It is shipped from Houston under pressures up to 2400 pounds per square inch to all points of the United States and many countries of Central and South America.

This wide demand stems back only to 1894 when Lord Rayleigh and Sir William Ransay isolated argon gas. Because it is so completely inactive and there are no known compounds of the gas, it was named from the Greek argos which means "lazy."

But the discoverers did not visualize the uses that would be found for argon. Its largest potential use now is in welding where it is flowed over the electric arc to exclude chemically active gasses from contact with the molten metal.

Inert gas metal-arc welding has several advantages over gas welding, such as a greater adaptability to welding the aluminum-zinc alloys, higher welding speeds, ability to weld thicker material and less distortion.

Argon provides a better cleaning action for aluminum and magnesium when welding with an alternating current. Under similar welding conditions less

gas and it provides a more stable arc.

Aluminum and magnesium are now being welded with an inert gas shield because of high weld quality and low overall cost. By using the inert gas process, practically all metals can be welded without the use of flux. Of course, no flux can be trapped in the weld and therefore the corrosion resistance of the weld is improved.

The ease of welding with inert gas has also played a large part in its increased use in the last few years. Sound welds of good tensile strength and ductility are produced in a minimum of time.

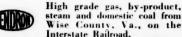
Special welding machines have been developed that automatically, by solenoid operated valves, control the flow of gas to the tip of the tungsten electrode. Typical of these machines is the Lincoln "inertarc" that starts the argon gas supply when the operator pushes a button on the welding torch. A timing device assures minimum gas usage and maximum life to the electrode.

After the arc is broken, a time delay in cutoff of gas and cooling water (used with the higher currents) can be pre-set to any period of time up to one minute. This maintains water and gas circulation to provide complete cooling as well as protection to the electrode in inert gas after the weld is completed.

It has only been in the last 10 years that this inert-gas type of welding has been used. From the first it was accepted with enthusiasm and today's demand assures it of a very busy future.



High grade gas, by-product, steam and household stoker coal from Wise County, Virginia, on the Interstate Railroad.



High grade, high volatile steam and by-product coal from Wise County, Va., on the Interstate Railroad.

The Premium Kentucky High Splint unmatched for domestic use. Produced in Harlan County, Kentucky, on the L. & N. Railroad.

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Genuine Pocahontas from McDowell County, W. Va., on the Norfolk & Western Railway.



High fusion coking coal for byproduct, industrial stoker and pulverizer use from Wyoming Co., W. Va., on the Virginian Ry.

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CINCINNATI NORFOLK

South Carolina Releases Industrial Payroll Study

When payrolls in industry increase, so do those in all other lines of business.

A study released last month by L. W. Bishop, Director of the State Research, Planning & Development Board, showed that South Carolina post-war industrial development has pushed payrolls in other businesses to all-time highs.

Wages in other businesses show up 150% since 1945, while industry's wages were rising 121% and industry's capital investment in plants by 111%.

"Many people do not realize," Mr. Bishop said, that when an industry comes to the state and starts paying out money in new payrolls, new opportunities are created in scores of other businesses.

"A man who has found a new job in industry must spend his wages somewhere, and stores, shops, filling stations, and theatres spring up to help him do so.

"These new businesses, in turn, create new profits and new money to be spent in the community. Thus new industrial dollars start a chain reaction which builds a stronger economy in every direction. This is true of both new plants and those which have expanded," he added.

Wages paid in the state reached well over the one billion dollar mark in 1945, a total gain of 187% over 1945, according to data compiled for the Research Board by the South Carolina Employment Security Commission. Figures included only payrolls covered by the unemployment compensation law, and actual totals would be considerably higher since hundreds of smaller businesses are not covered.

Here are some of the gains South Carolina has made in the post-war period, during which industrial development has been going forward at the rate of about \$100,000,000 a year.

Wholesale and retail trade: 161%. Service industries: 90%.

Transportation, communications, and utilities, 129%.

Finance, insurance, and real estate: 256%.

On all wages covered by the unemployment compensation law, a gain of almost \$700,000,000 has been recorded since 1945.

The industrial gains which are the central force in making this growth possible stem from the people themselves and their elected representatives, Mr. Bishop declared.

Customs Collections Reach New High at Houston

Customs collections through the Port of Houston reached the all-time high of \$15,363,247 at the end of the fiscal year

June 30-the fourth successive year that collection records have been broken.

Customs officials attributed the gain to the general growth of the Port and the Gulf Coast's expanding trade area. An increase was shown in practically all dutiable commodities, they added.

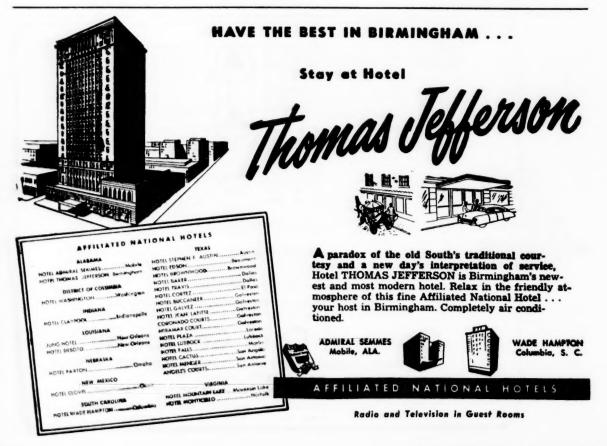
Duties paid at the Port of Houston for this fiscal year exceeded that of the previous fiscal year by more than \$3,000,-000. In the 1951-52 year, Houston collections totaled \$12.224.595.

In the entire Galveston Customs District, including Houston and four other ports, duties amounted to \$19,383,453 for the 1952-53 year. This compares with \$16,286,541 for the previous year.

Steel and burlap and jute bagging were among leading dutiable items, customs officials said.

Union Bag Expansion Program Under Way

Union Bag & Paper Corporation of Savannah, has completed the pulpwood system of its multi-million dollar expansion program. New wood handling equipment has been installed including a flume system to convey pulpwood to barking drums, an escalator conveyor, a new chip room, new screen room, two huge chip storage silos containing 60,000 cubic feet each, and new barking drums.



N&W Increasing Grain Storage Facilities at Norfolk, Va.

Grain storage facilities which will increase the capacity of the Norfolk and Western's elevator at Sewalls Point, Norfolk, Va., to over two million bushels, or 170 per cent, will be built immediately by the James Stewart Corporation, Chicago, the railway announced last month.

Total cost will be over \$1,000,000, including incidental work done by the railway's own forces. The contractor is expected to finish the job by next May.

The additional elevator space will have a capacity of 1,278,730 bushels. Present capacity is 750,000 bushels. There will be 32 new grain storage bins, each 24 feet in diameter inside and 106 feet high. Conveying machinery and an additional grain drier also will be installed. The addition will be located on the pier side of the present elevator.

When completed, the new facilities will be placed under long-term lease to the Continental Grain Company, holder of the lease on the present elevator. They will continue to be operated as a public facility.

Including its foreign affiliates Continental is the largest grain handling company in the world. It operates elevators not only at other ports but at principal terminals and in the major grain producing areas of this country. Its current activity at Norfolk includes the loading of 16 ships of the so-called "moth ball fleet" with about 224,000 bushels each of surplus grain—a total of more than 3,500,000 bushels. The fourth of the group is now at the pier, Grain is being loaded in the ships to relieve the acute shortage of inland storage facilities.

The N. & W. elevator is the only deep water grain facility between Baltimore and Mobile and, under Continental direction, utilization has expanded greatly in the last year. In 1952 Norfolk shipped only 3.6 per cent of grain exported from the east coast. In April, 1953 it shipped 16 per cent, ranking it third behind Baltimore and Albany. During May the export figure was the largest in the elevator's history.

"An expenditure of this magnitude is further evidence of the N. & W.'s faith in the future of Norfolk as a port, and our railroad's desire to more adequately serve the public and increase trade by expanding our multi-million dollar world trade facilities at the port," an N. & W. official said.

Abilene Chamber Studies Tyler Industrial Foundation

Three members of the Abilene Chamber of Commerce conferred with Chamber members in Tyler, Tex., July 9-10 and returned with ideas which they hoped to incorporate in creating an Abilene Industrial Foundation.

The Abilene men toured Tyler's industrial areas. The visitors were Abilene Chamber of Commerce manager Joe

Cooley; Morey Millerman, chairman of the industrial department, and Morgan Jones, Jr., a member of the industrial committee of the Abilene Chamber. All appeared impressed with the industrial growth of Tyler.

The group was there to study the Tyler Industrial Foundation and inspect plants and plant sites which have been responsible in a large part for the growth of Tyler.

"We are here to investigate the possibilities of creating our own foundation," Cooley said. 'It is our opinion that Tyler has been tremendously successful with its industrial program and many of our

Abilene businessmen have heard of the fine growth over here."

The visitors arrived in Tyler July 9 and were guests at a reception at the home of J. S. Hudnall, president of the Tyler Industrial Foundation, and on July 10 attended a breakfast at the Blackstone Hotel. They were then conducted on a tour of the Tyler industrial area by officials of the Chamber.

The Tyler Industrial Foundation was created in 1946 with a beginning capital of \$300,000. Since that time the Foundation has provided buildings for six manufacturing plants whose annual payrolls total more than \$3,000,000.

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Armco Series S Buildings, with unique Steelox construction, offer sizes from 4 by 4 feet to 40 feet wide by unlimited length.

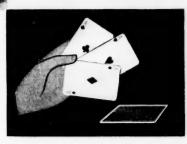
Armco Series P Buildings, built of steel framework covered by corrugated metal sheets, are supplied in clear span widths from 20 to 100 feet with unlimited lengths.

Both types of buildings have the



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C & I Life Bidg. • Houston, Texas.
Other Offices in Principal Cities

ARMCO STEEL BUILDINGS



Upson Names Ostheimer Western Div. Sales Mgr.

Special Washington representative of The Upson Company for the past three years, Eugene S. Ostheimer has been named Western Division sales manager with headquarters at 1706 Brush Creek Parkway, Kansas City, Mo. Upson manufactures laminated wood fibre panels and has its offices and plant in Lockport, N. Y.

Mr. Ostheimer joined Upson in December, 1948, as sales representative in the Washington area and two years later was appointed special representative at the nation's capital. Vice President Harry R. Shedd is director of sales of The Upson Company.

NEW PLANTS

(Continued from page 14)

dustrial plant on Fork Creek for Chester-field County Community.

LANCASTER—Springs Cotton Mills, Fort Sill, plans \$2,000,000 enlargement of Grace Bleachery building.

SIMPSONVILLE—Woodside Mills received bid from Daniel Construction Co., Greenville, for alterations and additions to present building.

SPARTANBURG—Congral Paling Co.

building. SPARTANBURG — General Baking Co. **SPARTANBURG — General Baking Co. **420 Lexington Ave., New York City, N. Y., received bids for new plant. Cowell Robin-son & Martin, 25 W. 43rd St., New York City, N. Y., Archts.

TENNESSEE

ANDERSON CITY—U. S. Atomic Energy Commission, Oak Ridge, plan improvement and construction of 9212 and A.E.C. Guard Department parking lots, Y-12 plant.
CHATTANOGA — Atlas Paper Box Co., Central Ave., plans addition. James C. Gauntt, Archt.
CHATTANOGA — Chattanooga Chamber of Commerce seeking approval for \$10,000,000 project to relocate railways and eliminate grade crossings.
LEBANON — Lux Clock Manufactturing Co., Waterbury, Conn., to build plant, Wallace & Clemmons, 1911 Division St., Nashville, Tenn, Archts.
MEMPHIS — Bowman Transportation Co. plans office and warehouse. Ralph Wilson, Archt.

Archt. MEMPHIS -

MEMPHIS — Cita Enterprises, Inc., plan office building, Dudley Jones, Archt. MEMPHIS—Memphis Packing Co, let con-tract to Southern Builders for plant addi-

tion.

MEMPHIS—Memphis Stone & Gravel Co.

plan office and shop. Robert Brown, Archt.

OLD HICKORY—E. I. duPont de Nemours
Co., Nashville, to build plant to manufacture
dacron textile fibre.

TEXAS

AMARILLO — Amarillo Motor Co., J. C. Christopher, 810 Tyler St., let contract to Ramey Construction Co., 618 W. 8th St., for Stl. 236 building, Howard Ensing, 312-B W. Tenth St., Archt.

AUSTIN—Olive & Myers Furniture Mfg. Co., Horace D. Spaith, Pres., plans \$1,300,000 plant. George L. Dahl, 2101 N. St. Paul St., Dalias Archt.

BEALWONT — William Cameron & Co., plans addition to warehouse. 1850 Gladys St. Spicer & Bush, 503 Amicable Bidg., Waco, Archts.-Engrs.

CLARK WODD — Celanese Corporation of America Petroleum Chemical Research & Development Dept., P. O. Box 108. let contract to Bigler & Bigler, 1545 Clodah, Corpus Christi, for \$56,940, laboratory building.

Smyth & Smyth, Guif Security Bldg., Corpus Christi, Arents.

CUBPUS CHRISTI** — International Harvester Co., 2025 Leopard, let contract to B.

M. Snutord, 2728 Agnes, for warehouse and other buddies.

M. Snutord, 2728 Agnes, for warehouse and office building.

BALLAS—Aermotor Co., 2300 Summer, let contract to Miller & Norton, 4415½ Beimont, for \$35,000 office and warehouse, 2839 Nagle St. R. M. Strode, 6617 Snider Plaza, Archt.

BALLAS—Bearing Chain & Supply Co., 2826 Elm St., let contract to Vilbig Brothers, Box 5926, at \$34,985 for warehouse and office building. Joe Gordon, 4425 Greenville Ave., Archt.

office building. Joe Gordon, 4425 Greenville Ave., Archt.

DALLAS—Haggar Co., 6113 Lemmon, let contract to Acme Construction Co., 1661 Mariposa, at \$30,000 for plant remodeling.

DALLAS—Earl M. Jorgensen Steel Co. received bid from O'Rourke Construction Co., 1001 W. Commerce St., for \$101,800 warehouse addition. Dunaway & Jones, 4919 Montrose, Houston, Archts.

DALLAS—Pittsburgh Plate Glass Co. received bid for industrial building at Irving Blvd. & Glass St. George L. Dahl, 2101 N. St. Paul St., Archts.—Engrs.

DALLAS—A. A. Porter Lighting Co., 2615 Gasion Ave., iet contract at appiox. \$22,000 to Yarbrough Construction Co., 4515 Prentice St., for warehouse.

to Yarbrough Construction Co., 4515 Frenche St., for warehouse.

DALLAS — Rusco, Inc., 5033 Berkshire Lane, let contract to Marberry Construction Co., 5526 Dyer, for \$25,000 office build-

ing.

DALLAS — Trinity Portland Cement Co.,
Republic Bank Bldg., let contract to Austin
Building Co., 1000 Singleton, for \$96,000
storage and loading facilities, 1618 N. Chalk

Hill.

DAILAS—Wyatt Metal & Boiler Works, 1901 W. Commerce, let contract to Austin Brothers Steel Co., 1815 Coombs St., for addition to plant, 1607 W. Commerce.

DONNA—Central Power & Light Co. plans remodeling building. Zeb Rike, Nelson Bldg., McAilen, Archt.

EVADALE—East Texas Pulp & Paper Co. received bid from McGinnis Brothers, P. O. Box 2475 Houston, for canal and drainage structures, \$148,467.

FORT WORTH — American Telephone & Telegraph Co. let contract to Thomas S.

Telegraph Co. let contract to Thomas S. Byrne, National Bank Bldg., for radio tower, 3900 Normandy

3900 Normandy
FORT WORTH—Consolidated Vultee Aircraft Corporation let contract to Texas
Bitulithic Co., N.W. 5th St. at \$71,099 for repairing taxiway.
FORT WORTH—Southwestern Bell Telephone Co., K. A. Ganssie, 398 S. Akard St.,
Dallas, Chief Engr., let contract to Albert L.
Smith, 1109 Currie, Fort Worth, for air conditioning and miscellaneous work in Edison
Bldg.

pinone Co., K. A. Ganssie, 398 S. Akard St., Dallas, Chief Engr., let contract to Albert L. Smith, 1109 Currie, Fort Worth, for air conditioning and miscellaneous work in Edison Bidg.

FRISCO — Southwestern Bell Telephone Co., 308 S. Akard St., let contract to Smith & Brinkley, Denison, for dial building.

GAINESVILLE—National Supply Co. plans \$3,500,000 manufacturing building.

GOLDSMITH—Gulf Oil Corporation, P. O. Box 382, received bids for Hendrick Pumping Station, Winkler County, and Goldsmith Pumping Station, Ector County.

HOUSTON—Aber Co., Inc., 206 Jensen St., received bid from J. N. Heard, 1310 McKinney, for office building, Ricks St. near Almeda Road, Claude E. Hooton & Truman B. Douty. Herman Professional Bidg., Archts.

HOUSTON — Battlestein's, Inc., 812 Main St., let contract to O'Rourke Construction Co., 4011 Koehler, for \$161,770 warehouse building, N.E., cor. West Dallas Ave. & Peveto St. MacKie & Kamrath, 2713 Ferndale Place, Archts.

HOUSTON — Distributors Land Co. let contract approx. \$47,500 to Cook Construction Co., Box 6561, for warehouse, 5108 Peach.

HOUSTON — Distributors Land Co., received bid from Pence Construction Corp., Box 226, Bellaire, for \$54,900 warehouse addition, 3202 Harrisburg Blyd, George W. Edwards, 1509A Cochran St., Dallas, Archt.

HOUSTON — Knapp Chevrolet Co., 815 Houston Ave., let contract to Tellepsen Construction Co., P. O. Box 2386, for head building.

HOUSTON — Knapp Chevrolet Co., 815 Houston Ave., let contract to Glenn H. Engbrock Inc., P.O. Box 12055, for additional facilities. Irvine & Hoyt, 5519 Memorial Drive Archts.

KERNS—Southwestern Bell Telephone Co., K. A. Ganssle, 308 S. Akard St., Dallas, let contract to Glenn H. Engbrock Inc., P.O. Box 12055, for additional facilities. Irvine & Hoyt, 5519 Memorial Drive Archts.

KERNS—Southwestern Bell Telephone Co., K. A. Ganssle, 308 S. Akard St., Dallas, let contract to Glenn H. Engbrock Inc., P.O. Box 12055, for additional facilities. Irvine & Hoyt, 5519 Memorial Drive Archts.

KERNS—Southwestern Bell Telephon

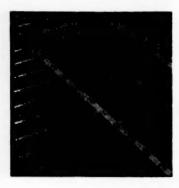
GREENVILLE—Thackston Chevrolet Co., B. F. Thackston, let contract to Fletcher J. Capell Construction Co. for \$39,775 building to house paint and body shop. W. E. Freeman, Jr., Archt.

JEFFERSON — Jefferson Bleachery, Inc., Cary C. Boshamer, Pres., plans \$250,000 in-

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MERCEDES — Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, let contract to Frank G. Parker Construction Co., Sox 821, Harlingen, for dial building, Gill & Harrell & Assoc., 1913 San Jacinto St., Dallas, Archts, and Engrs.

ORANGE—Spencer Chemical Co. of Texas. Kenneth Spencer, Pres., plans chemical plant.

Kenneth Spencer, Press, plant.

PORT LAVACA — General Telephone Co. of Southwest, Roy Autry, Press, plans Exchange Building, Atcheson & Atkinson, Sanford Bidg., Lubbock, Archts.

RAYMONDVILLE—General Telephone Co. of Southwest, Roy Autry, Press, and R. L. Hastings, Building Engineer, Reserve Life Bidg., Dallas, plans \$100,000 exchange building, Atcheson & Atkinson, Sanford Bidg., Lubbock, Archts.

Bidg., Dallas, plans \$100,000 exchange building. Atcheson & Atkinson, Sanford Bidg. Lubbock, Archts.

SAN ANGELO—Bill Ragsdale Tire Co. let contract to R. B. Owens, 307 Glenmore Dr., at \$18,913 for building remodeling and modernization. Leonard Mauldin, Phillips-Talley Bidg., Archt.

TEXAS CITY—Texas City Terminal Railroad Co. plans office building and warehouse. Wirtz. Calhoun, Tungate & Jackson, 2506 Richton, Houston, Archts.

TYLER—Cotton Belt Railroad, St. Louis, Mo., c/o. A. J. McKenzie, Pres., plans \$1,-250,000 office building, Wyatt C. Hedrick, 1005 First National Bank Bidg., Fort Worth, Archt.-Engr.

WACO—Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, let contract to Smith Building Co., Inc., Box 796, for telephone building, N. W. cor. Montrose Ave. & Woodbine Ave.

VIRGINIA

PORTSMOUTH — Chesapeake & Potomac Telephone Co. of Virginia to spend \$1,000,000 for enlarging and improving facilities, including 3 story addition on central office building.

NEWPORT NEWS—Esso Standard Oil Co. acquired 846 acres. W/s Elizabeth River, bet. Craney Island and West Norfolk.

NORPOLK—Norfolk & Western Railway plans increased grain storage facilities at Sewalls Point Elevator; total cost over \$1,000,000.

WEST VIRGINIA

ELKINS—Chamber of Commerce sold \$95,-000 bond issue for modern factory build-

000 bond issue for modern factory build-ing for leasing.

FAIRMONT — Monongahela Power Com-pany received bid of \$1,428,900 from South-eastern Construction Co., Charlotte, for office building, C. E. Silling & Assocs., Archts. FAIRMONT — Westinghouse Electric Corporation plans two new warehouse build-ings for its Lamp Plant; cost \$185,000. LONG REACH—Union Carbide & Carbon Corp's Linde Air Products Co, to build \$13,-000,000 silicone plant.

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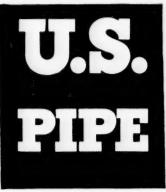
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